Occidental Medical Times.

VOL. XI. OCTOBER, 1897. NO. 10.

A CENTURY OF SURGERY.

One of the Lane Course of Medical Lectures, delivered at Cooper Medical College, September 24, 1897.

By CHRISTOPHER HEATH, F. R. C. S., Home Professor of Surgery, University College Hospital, London, etc.

I thought it would not be inappropriate to conclude this course of the Lane Medical lectures by endeavoring to give you an epitome of the surgery of the present century.

We are within two years of the end of the nineteenth century, and during that century very great progress has been made in the science and art of surgery, and it seemed to me that it would be appropriate on an occasion like this to sum up briefly, and to the best of my ability, the progress that has been made.

I would remind you that at the beginning of the century Europe was plunged in war; that Britain was constantly engaged in fighting with Napoleon, either in the peninsula, or elsewhere, and lastly came the final and great victory of Waterloo in 1815; and, therefore, that during the first fifteen years of the century the attention of surgeons was more or less directed to the injuries inflicted on the field of battle.

I would remind you, also, that those were the days long antecedent to what we now term arms of precision. I forget the exact data, but it was calculated that, of a large number of bullets which were fired in a given battle, only a very few brought down a soldier, and still fewer actually killed him.

The surgery of that day was rough and ready. The surgeon followed his regiment to the field of battle. He did his best at the time to arrest hemorrhage, and then, subsequently, either on the field or in adjacent houses, or, if possible, in a hospital—if there were a hospital—he did his best by amputating maimed and shattered limbs to save the patient; but, necessarily, although we have very few statistics of those days, the mortality was exceedingly high. But still, the army and the army medical service was a very good training for the surgeon.

I would remind you that there was a Cooper in those days—Samuel Cooper, who was afterward the Professor of Surgery at University

College, and the author of works which must have been well known in those early days, but are, perhaps, not so well known at present, namely, Cooper's "First Lines of Surgery," and Cooper's "Surgical Dictionary." I say that Samuel Cooper began his life as an army surgeon; that he served with the British army for many years, and that only on the conclusion of that service did he become a civil surgeon.

So, also, with Guthrie. Guthrie, who lived to be president of the College of Surgeons; who was surgeon to Westminster Hospital, and who founded the Westminster Ophthalmic Hospital in London, was for many years an army surgeon, and his valuable work upon the surgery of the arteries was based mainly upon the experience he gained in the Peninsular war.

So, also, with the Scotch Professor of Surgery, Ballingall, who was an eminent man, and who also derived all his experience from the field of battle.

Lastly, do not let us forget that most eminent surgeon, Baron Larrey, who was so highly esteemed by his master, the first Napoleon, that he said when Larrey was present it was equivalent to an army corps, because the soldiers felt that their wounds would be looked after and that their interests would be considered.

When the war had come to an end, of course then there was time for those who had got their training to bring that training to bear upon civil practice, and we find accordingly, in the early part of the century, that there was considerable progress made in various subjects.

First, I would venture to mention the subject of hernia. Hernia, of course, has existed as long, probably, as has man, but the surgery of hernia was exceedingly rough. It was very much neglected, and patients very commonly died—either from the hernia not being operated upon, or from its being operated upon so ignorantly and roughly that the patient succumbed. You may possibly remember that Queen Caroline, the wife of George II, died from a strangulated femoral hernia. This was not so much in her case from any failure on the part of her surgeon, Ramsden, to operate, but simply from the fact that she, being a very masculine woman, positively refused to have any advice until she had got into such a critical condition that Ramsden was unable to save her life. It was a great loss to the country, and especially to her husband, who was a weak man, and depended to a great extent upon his wife.

Now, Lawrence, who had been a pupil of Hunter's, and who was early attached to St. Bartholomew's Hospital, wrote, early in the present century, a treatise on hernia, which is still a valuable work. He first brought out carefully the anatomy of the parts concerned, and then he laid down very good rules for the general treatment of the affection. Of course, I am speaking now only of hernia in the ordinary form, either reducible or strangulated. The operation for the radical cure of hernia had not been thought of in those days, and was a matter which came up in the last half of the century, and I shall have to allude to it further on.

Another subject which engrossed a great deal of attention was the treatment of calculus. Calculus, of course, has been known in all countries for many centuries. We have early records of operations for calculus in Egypt and in the East, and then we find that, as modern progress has been made, operations have been introduced and again abandoned from time to time, so that the whole of the surgery of calculus in the bladder has been one of constant change.

Now, I would just remind you that there was a great surgeon in England in the time of Charles I, who was named Cheselden. He was surgeon to St. Thomas' Hospital, and he had, very rightly, a great reputation for the lateral operation of lithotomy, and, consequently, he impressed upon not only his contemporaries, but also upon those who succeeded him, that the lateral operation was *the* operation to be performed.

Accordingly, at the beginning of the present century, the operation usually performed was the lateral method. But there were various methods and improvements, so-called, and I think I ought to mention one which for some years held its place very firmly, and which has been comparatively lately abandoned by some surgeons, namely, the use of what was called Hawkins' gorget. Hawkins was one of the surgeons of St. George's Hospital, and he invented an instrument, sometimes used sharp and sometimes blunt, but more usually a sharp cutting gorget, which was considered by himself and by those who followed him to be a great improvement in the operation; so, surgeons went on cutting patients with this instrument, and with a very fair amount of success.

Still, as Sir Benjamin Brodie says in his autobiography, there were no cases which gave him more anxiety than cases of calculus, because he, being in a large fashionable practice in London, necessarily had to do with persons of considerable note, and it was a matter of great importance, of course, that those valuable lives should be preserved. The death rate was very high, and, accordingly, attempts were made by Brodie and by others—by Civiale in Paris, by Leroy d'Etiolles, and by Heurteloup, and by Weiss, the instrument maker, who gave most important assistance, to devise instruments by which the stone might be broken and the fragments extracted from the bladder without any cutting operation.

Thus the first lithotrity was introduced, and I may say that the first attempt to break a stone was made by means of an instrument consisting of two blades, in which the force was applied by means of a hammer. It seems now a very rough method of proceeding, and no one would think for a moment of adopting it; but when Weiss, the instrument maker, showed that it was possible to adapt a screw movement, then the form of lithotrity became materially modified, and we had very much the same instrument that we have nowadays, with some slight modifications, consisting of a male and female blade, in which the stone was crushed and broken up into fragments.

Sir Henry Thompson, of course, is well known to you all as a surgeon who has distinguished himself in perfecting that operation, and I may say that, having frequently witnessed it at his hands, I think he brought the method to as near perfection as is possible.

Then you will remember that, although the stone were broken up by a series of sittings, it was left to the natural efforts of the patient to evacuate the fragments. The first attempt to assist evacuation of the fragments was no doubt due to Mr. Clover, an English surgeon, who was in the habit of giving an anesthetic for Sir Henry Thompson when he required it for any of his operations. It struck him that if some form of exhausting bottle were adapted to a catheter of large size, probably a good many fragments might be extracted; and although at first Sir Henry Thompson only used that instrument for the extraction of the minute fragments remaining at the end of the series of sittings, there can be no doubt that that was the beginning of the evacuation system.

But it is really to Bigelow, the eminent American surgeon, who died only a very few years ago, that we owe the greatest improvement, for what he termed litholapaxy, or better called, I think, rapid lithotrity. As practised by most surgeons nowadays it consists in putting the patient under the influence of chloroform, and breaking up the stone by a series of manipulations, at the one sitting, into small dust, and then, by means of a powerful evacuating bottle, drawing out the fluid contained in the bladder and all remains of the stone. The method of Bigelow's has no doubt opened up quite new features in the operation of lithotrity, and has enabled the surgeon to treat cases of stone which he never would have ventured to treat by that method except he had the instruments which Bigelow devised.

Then, curiously enough, comparatively lately, within the last 20 years, there has been a recurrence to an old operation which dates probably many centuries back, namely, the suprapubic operation for lithotomy; and it is a curious fact that Cheselden, the great lithotomist, undoubtedly at one time performed the suprapubic operation, which, as I said, became his favorite.

Now, Petersen, who was a Danish surgeon, deserves the credit of having brought this suprapubic method again into practice. He showed what every anatomist knew, that by distending the bladder with fluid it could be raised up sufficiently to avoid any danger of opening the peritoneum when an incision was made above the pubes. But he also showed, which was not so well known, that by distending the rectum also the tendency would be still more to elevate the bladder, and therefore to keep the peritoneum still more out of danger. Accordingly he devised the modern suprapubic operation, which is now recognized by surgeons as being perhaps the safest method; so much so that at the present time, in England at least, the perineal operation has fallen into disuse, and I know that students in the London hospitals now hardly ever, if ever, see the old lateral operation performed. No doubt the suprapubic operation has the great advantage of inflicting no injury on very important and vital structures, and it certainly does give, as I know in my own practice, the opportunity of extracting very large stones, which could not, by any possibility, be extracted by any other method.

While on this subject let me go forward a few years just to mention, in order that I may not omit it, a treatment which came into vogue some 20 years ago, mainly by the efforts of the surgeons of the Leeds Hospital, for the relief of that very common affection of old age—enlarged prostate. It was found by several of the Leeds surgeons that it was quite possible to open the bladder above the pubes, and to remove withs cissors any prominent portions of the prostate gland with exceedingly good results. Although this for some time had a certain amount of credit, it has fallen somewhat into disuse in Great Britain, and I do not hear of many operations of that kind being done now, nor have I thought it well to do any myself of late.

Then there is another method in connection with the same subject to which I must just allude which has come up of late, and mainly through the influence of an American surgeon, White, and that is the possibility of the operation of castration having a very marked effect upon the development of the prostate. The question is still *sub judice*, but so far as we can tell there is a good deal of truth in it, and I think that in suitably selected cases it is quite a legitimate and proper procedure.

Among the questions which arose necessarily during the period of the wars, was one as to how amputation should be performed in most cases. You must bear in mind that in those days all the amputations were circular. They were made as recommended by John Bell, of Edinburgh, by first cutting circularly through the skin, and then turning it backward, then a second section was made through the muscles, which were also drawn back, and finally the bone was divided high up. Remember, if you please, that these were the days before anesthesia, and consider for a moment what such a tedious and necessarily bloody operation it must have been for the patient to support. A division, first, of the skin; then of the muscles, and then of the deeper structures and of the bone, must necessarily have been exceedingly painful. Not only that, but it was tedious; let the surgeon be as expert as he might, it was an operation which was necessarily slow. Still, it gave very fair results.

But in the north there was a surgeon growing up named Robert Liston, who saw that an improvement might be made in rapidity, and also in getting a better covering for the bone by what we call the flap method. He practised that first at the Edinburgh Infirmary, and then when he was called to London to be surgeon at University College Hospital, in 1836, he introduced the practice there; and he was the first surgeon who undertook amputations by the flap method in any London hospital.

His method had the advantage of rapidity—being a very powerful man, over 6 feet in height—he would grasp a thigh, transfix it with a long knife, and cut one flap above, and another flap below the bone, draw back the flap with his left hand, saw through the bone, and pride himself on doing it in less than one minute. Well, that was, of course, quite a new thing. Surgeons had never before seen such rapid amputations, and I need hardly say that to the unfortunate patient who had to put up with the agony of the operation, the rapidity was a great gain.

I am not old enough to have had any experience in surgery before the days of anesthesia, but I have learned from those who have had, that they gave their patients a good stiff glass of brandy and water immediately before the operation, and that it was with that kind of "Dutch courage," if you may so call it, that they managed to submit to these terrible mutilations. I had an opportunity once of talking to a patient who had had his thigh amputated before the days of anesthesia, and I asked him to tell me what it was like. "Well," he said, "you know what a bad burn is." I said, "Yes, I do." He said, "Well, it was exactly like that. When the knife went through the flesh of my thigh it was exactly as if I was burned as severely as possible." One can easily understand that that does represent very fairly the feeling that would be induced by the transfixion of the living tissues of the limb by a long knife carried rapidly through it.

The flap method having been introduced by Liston, it was of course found by him and by other surgeons that by adopting it to various parts of the body, it was possible to give a better stump and to make a longer one than by the circular method.

I would just merely allude to that very interesting amputation which is generally connected with Mr. Syme's name. He showed that by dissecting a flap off the heel of the foot he could take away the foot and leave a limb very nearly as long as the opposite one, and that the patient was afterwards able to walk upon the stump. We still practise that operation, for it is an exceedingly good one in appropriate cases, and it is one of the best examples that I know of of the improvement brought into surgery by the flap method.

As I mentioned yesterday in my lecture on Diseases of the Joints, up to the middle of the present century, or very nearly so, amputation was done in all cases of diseased joints. Patients were encouraged to bear their diseased joints as long as they could, and when they could not bear them any longer, or when their strength was giving away, as a last resource the surgeon recommended and performed amputation. But when anesthesia came in, in the year 1846, the whole thing was altered. Surgeons found then that they had time, during the anesthesia, to deal with joints in a very different way from what they had done previously, and it was then that, owing to the efforts of Syme and Liston, and Fergusson particularly, that the operation which we call resection came in. By resection we mean that instead of cutting off a limb where there is a disease the joint was opened, the diseased ends of the bone were removed, and the fresh-cut ends, being brought together, united, and the patient recovered with a straight, stiff, and somewhat shortened limb.

Then again, as I mentioned yesterday, of late years, upon that even an improvement has been made, and we now have the method of arthrectomy. In a comparatively early stage, we expose the interior of the diseased joint, we clip away all the diseased tissues, we scrape away any diseased bone, we apply antiseptics in the form of iodoform to the interior of the joint, we dress the joint antiseptically, and we find that these patients recover with exceedingly useful limbs, and sometimes with movable joints.

That brings me up to the date—that very important date, 1846, and the introduction of anesthetics. We owe to this country the introduction of that beneficent method, and particularly to the late Collins Warren, of Boston, in whose clientele it was that the first so-called experiment in anesthesia took place.

There was a dentist named Morton, who lived in Boston, and he had made experiments with nitrous-oxide gas, which, as had been known before, from the time of Sir Humphrey Davy, produced a certain amount of excitement, and hence was called "laughing-gas," and if pushed beyond that, it produced a temporary anesthesia. Morton employed this in extracting teeth, and then he bethought him that he might possibly find something which would be a little more potent and more manageable. This he found in sulphuric ether, and then, having been successful in a good many cases of tooth extraction under the influence of the ether, he spoke to Warren, of Boston, and asked if he might have the opportunity to give ether for some patient upon whom Warren was to operate.

Accordingly, in October, 1846, a day was fixed on which an operation was to be performed, and a patient to whom Morton was to administer the anesthetic. I may say that on this very afternoon I had the pleasure of conversing with a gentleman[1] who was present on that very memorable occason. Everything was ready for the operation, but for some reason Morton was late, and Warren rather sarcastically said, "The gentleman is not coming," and evidently thought that he had withdrawn and feared the event. However, just as they were going to begin the operation, Morton arrived, and he administered the ether and Warren performed his operation. The patient was perfectly quiet, perfectly insensible, and would hardly believe, when he woke up, that the operation had been performed. Warren's comment upon it was, "Gentlemen, there is no humbug in this," and that was quite a true word, for it was from that date that anesthesia began.

We have there the commencement of anesthesia on October 17, 1846. The news of this was very soon sent across to England, and a dentist there extracted some teeth under the influence of ether. He invited Robert Liston to come and see a tooth or two extracted, which he did, and then he himself, on the 22d of December, 1846, performed two operations in University College Hospital—an amputation of the thigh, and the removal of a toe-nail—both operations, I need hardly say, are excessively painful. The patients were put under the influence of ether by Dr. William Squire, who is still living, and with complete success.

---

[1] Dr. Washington Ayer, of San Francisco.

The news of that, of course, spread rapidly to Glasgow and Edinburgh, and within a day or two the thing was there repeated, and so anesthesia became an established fact.

You will observe that in all these cases ether was administered, and ether held its sway for a few years. But Simpson, the great accoucheur, who afterwards became Sir James Simpson, of Edinburgh, was not quite satisfied with ether, and he was making a search for some more portable anesthetic, and also for an anesthetic which he could give to women in the pangs of labor. After various experiments, some of which were very dangerous and were carried out on his own person, and on that of Matthews Duncan, who was his assistant, he came upon a fluid which was called chloroform. He found that that was portable; that it easily put the patient asleep, and that it seemed to have some advantages over ether. Accordingly, chloroform came into fashion, and held its sway for a good many years, and then, from time to time, an unfortunate death occurred; and I think there can be no doubt in anybody's mind that if caution is not used in administering chloroform it is rather a dangerous drug. I mean that an overdose of chloroform administered suddenly to a patient may induce stoppage of the heart.

We did our best, however, and then there was a sort of reaction in favor of ether; and about the same time, twenty years ago, it first was brought out, rather curiously, that the nitous-oxide gas, the old "laughing-gas," if it was administered pure, without any admixture of ordinary atmospheric air, was a very potent anesthetic, and it was shown by various demonstrations which were given, that teeth might be extracted very readily and without any pain under the influence of the nitrous-oxide gas. I need hardly say what a boon that was to dentists, and to the patients who had to resort to dentists. Accordingly, nitrous-oxide gas became the fashionable means of producing anesthesia for dental and other short operations.

But, then, it was thought that if it was possible to put a patient off quickly with nitrous-oxide gas, why should you not go on administering ether afterwards, and so keep up the anesthesia; and, accordingly, that is what we do nowadays. In the great majority of my cases, unless they are operations about the mouth, the patient is anesthetized very rapidly by being put first under the influence of the nitrous-oxide gas, and as soon as he becomes insensible, which will be in something under a minute, the gas is withdrawn, the ether is turned on, and the anesthesia is prolonged as much as may be necessary for the operation.

There is no difficulty, of course, in keeping a patient asleep for an hour, if necessary, but I think that sometimes surgeons make a mistake in the present day in being too deliberate in their operations. In former days, when there were no anesthetics, they were obliged to be quick; nowadays, when we have unlimited anesthesia, I think there is sometimes a tendency for the surgeon to be too deliberate, and, as a result, that his patient gets too much ether. I hear of patients being kept anesthetized for two or even three hours; and a lady told me not long ago that she herself had been the victim of an operation which took four hours, and I could only say to myself I was surprised she was there to tell it me. When one hears of such lengths as that, one cannot but think that an undue strain is put upon the patient's heart.

So much, then, for anesthetics in 1846.

Let me go on now at once to the other great subject of the century, namely, antiseptics. There can be no question, and no one for a moment disputes it, that Lord Lister is entitled to the whole of the credit of having brought out what we may call antiseptic surgery.

Mr. Lister, as he was then, was an old pupil of Liston's, and he made the acquaintance of Syme when Syme came up for a very few months to University College Hospital in order to succeed Liston. Syme, for private reasons of his own, went back to Edinburgh, and Lister followed him there, became his house surgeon, and married his daughter. Then Lister, having settled down in Scotland, as it were, was appointed Regius Professor of Surgery at Glasgow; and it was in the old Glasgow Infirmary, a building which was in many respects most unsanitary, that Lister was induced first to try whether something could not be done to improve the condition of his unfortunate patients.

He found that, do what he would, all his wounds suppurated, and the great majority of his patients died from infection of the system from the wound; and he happened, more by accident, I think, than anything else, to fix upon carbolic acid. Carbolic acid about that time was coming into note as an ordinary antiseptic. It was used to throw down drains, and to take away offensive smells, and so on, and he used it; and one of his earliest experiments was to take a case of compound fracture and to dress it with carbolic acid, and see what happened. What happened was, that to his very great surprise—and I am told this by those who were present at the time and saw it, that Lister himself was perfectly astonished—when he came to open the compound fracture, instead of suppuration there was a clot in the wound, organizing; there was no inflammation, the part was quiet, and it was healing under the influence of what at first would appear to be a great irritant.

I am not going to follow out the details. Of course, they are to be read in any of the various surgical works. It is sufficient to say that, thanks to Lord Lister, a system was inaugurated which has been modified slightly from time to time, but which is now put upon a perfectly firm basis, by which we are enabled to keep our wounds perfectly sweet by having absolute cleanliness, both of the patient, of the surgeon, of the nurse, of the instruments, of all surroundings, and then by applying proper dressings of either aseptic or antiseptic methods, according to circumstances, we have such results as our forefathers never could have anticipated. I mean that wounds heal without any inflammation, the patients lie quiet in bed, and take their food from the first without any fever, and we are enabled not merely to save a great many lives, but we are enabled to undertake operations which we would never have ventured to undertake except with the assistance of antisepsis.

I am old enough to remember what amputation of the thigh came to in Fergusson's practice, and in Erichsen's practice, and in that of other very good surgeons. The patients almost all died. It was quite the exception when a case of amputation of the thigh got well. Nowadays such a thing as death from amputation of the thigh is hardly known; and if it does occur, one considers very seriously what could have gone wrong, that a patient with an ordinary amputation of the thigh should have succumbed.

More than this, we are now able to do so much more for patients, that the range of surgery has become enlarged, and the amount of surgery much greater than it possibly could have been before the days of anesthetics and antiseptics.

There remain just two or three more special subjects that I should like to say a word upon in connection with modern surgery.

First, I must put the operation of ovariotomy. There can be no question that the first ovariotomist was Ephraim McDowell, who was born in Rockbridge county, Virginia, on March 11, 1771. He went over to England, as was very much the custom with Americans in those days, for there were really no American schools. At Edinburgh, he came into relation with Lizars, who was a surgeon of that city, and who had the notion, though he had never carried it out, that it might be possible to remove an ovarian tumor.

McDowell came back to the United States and settled down in a small practice, and in a mere village—Danville, Kentucky—and there he happened to have a patient come before him in the year 1809—a Mrs. Crawford, who had a large abdominal tumor. The woman had supposed herself, as is so often the case, to be pregnant, but when months went on, it became clear that it was not a case of pregnancy, and she applied to McDowell for relief. McDowell, entirely on his own authority, and apparently without consultation with anybody else, performed the first ovariotomy in this country village, and, most providentially, that patient got perfectly well.

I have here a short life of McDowell, and a portrait of him, which appeared quite recently in an English periodical called the *Practitioner*. There are a series of heroes of medicine, as they are called, published in that periodical, and Ephraim McDowell appears among them. I would just say that Ephraim McDowell's merits have been recognized by his countrymen and that a monument was erected to his memory in 1879, by the Kentucky State Medical Society, and that Professor Gross, who at that time was the father of American surgery, attended and made an oration in connection with that function. At the end of Prof. Gross' address, McDowell's knocker—the knocker which for many years had hung upon his door—was solemnly presented to Prof. Gross, and a speech made upon the occasion by Dr. Cowling, of Louisville.

There we have the history of the first ovariotomy. It did not make a great sensation. McDowell wrote to Lizars and told him what he had done, and Lizars had a case or two himself, and then there were one or two cases heard of every now and then, but the operation was a very fatal one, and it did not seem to have been much taken up. In fact, ovariotomy was not really established as a recognized operation until Spencer Wells took it up in the year 1858.

Sir Spencer Wells died only last year, at a good old age, and he had performed nearly two thousand ovariotomies in the course of his life. He began as a naval surgeon; he went out to the Crimea as one of the civil surgeons sent to Smyrna, and when he returned at the end of the Crimean war, he was appointed one of the surgeons to the Samaritan Hospital, where he was seeing pretty constantly cases of abdominal tumor. At that time nothing was done for these cases except to tap them, and sometimes to inject iodine, which very seldom did any good.

Wells made up his mind that he would perform ovariotomy, and that he would continue to perform ovariotomies until he had made up his mind whether or not the operation was a justifiable one; and he pledged himself from the first to publish all the cases and to show all the specimens, and he very carefully carried that out. I need not go into details, but he soon was able to see that, with due attention to the surroundings, with care in the selection of the case, and with a certain amount of skill, which he soon acquired in the operation itself, it was not such a fatal operation as was supposed.

I may say that McDowell's original operation was to tie the pedicle, and leave the ligature out of the lower end of the wound. Wells adopted the same plan at first, but finding that was not very successful, he then fell back upon a suggestion of Mr. Jonathan Hutchinson, namely, to pull the pedicle out as far as possible in the wound, and then to clamp it with a sort of callipers outside the wound; and for a very long time, for many years in fact, that was the method which he adopted.

In the course of time, about the year 1872 or 1873, Lister's antiseptic treatment came in, and Sir Spencer Wells adopted it, and at the same time—because, of course, it was very important, in the estimation of Mr. Lister, that the abdomen should be closed—adopted the the plan of ligaturing and "dropping," as it is called, the pedicle, by which I mean that the pedicle was secured firmly by a ligature, dropped into the peritoneal cavity, and never heard of any more, the whole of the abdominal wall being closed. Now, whether he was right in attributing the great improvement in his cases to the adoption of the antiseptic method, or, as maintained by some authorities, that his improvement dated from the time when he tied and dropped the pedicle, I do not care to consider. It is quite sufficient to say that his mortality diminished, his success increased, and that he was, at the time of his death, the most successful ovariotomist that the world has ever seen.

Of course, there have been many others. The operation now is a well recognized operation, and out of it has grown many other operations. I mean that surgical gynecology has become developed to a very great extent as the result of these successful ovariotomies and the removal of the ovaries when they are not enlarged, the removal of uterine tumors, and even of the uterus itself, has followed upon the successful introduction of ovariotomy.

There is another subject that I would say a word about; that is, the great advance in abdominal surgery generally; because it is not merely in the pelvic organs that so great an improvement has been made, but the other organs of the abdomen which were formerly thought to be quite beyond the surgeon's skill, are now reached and relieved with the greatest facility. I would remind you that gall-stones can be removed, not merely from the gall-bladder, but from the ducts leading from the gall-bladder, and that they can be picked out and broken down and extracted with very great success, and of course the relief for these unfortunate patients must be enormous. This applies not only to the liver, but also to the kidney, for it is now a matter of every-day occurrence that stones should be extracted from the kidney itself, and if that organ be diseased, it may be removed.

The same is true with regard to other organs. The spleen, even, has been removed. Spencer Wells removed a spleen more than once, but I think he had no successful cases; but there have been successful cases of removal of the spleen, of removal of portions of the pancreas, of cysts of the pancreas, removal of cancer of the stomach, and of various parts of the intestines.

So that altogether during the latter half, or the latter quarter, we may say, of the nineteenth century, the surgery of the abdomen, and for that matter also the surgery of the chest, has become enormously enlarged.

But even the head is now a region for the surgeon to interfere with. After the lectures which you heard last year from the most eminent authority upon brain surgery, Prof. Macewen, I need say nothing upon that subject. But I would just mention that we owe a great deal to Dr. Keen, of Philadelphia; and that we also owe something to my colleague, Mr. Victor Horsley, of London, as well as to Dr. Macewen, for the progress which has been made in brain surgery.

Lastly, let me just mention that which has come up quite recently, the application of photography to the illumination of the deeper structures of the body.

The Roentgen rays, as they are called, are no doubt extremely valuable. They bring into relief parts which are hidden from view by the skin, and soft tissues covering them. But I think a little caution will have to be used, because it is not every structure which shows up equally well under the Roentgen rays, and I am afraid if we do not take care that we shall get into difficulties over our fractures. I find, as a matter of fact, that the callus or new material which is thrown out in order to unite the fracture does not show at all under the Roentgen rays. You can see the outline of the fracture, and you can see the broken ends of the bone, and to the unlearned it looks as if the surgeon had made a great hash of his business. We must take care that that is clearly understood, or else we shall be liable to more actions for malpraxis than ever, and I am sorry to note that in this country at least actions for malpraxis, so-called, in relation to fractures are not so very uncommon.

Having run through the principal subjects of progress during the past century, let me now say a few words about some of the men who did the work.

First, let me remind you that, though not actually in the present century, it was only in 1793 that the great John Hunter died. There can be no question that John Hunter was the man who made the greatest progress in surgery in the last century. He died at the end of the last century, but he left a legacy behind him, not merely in his writings, and in his museum, but in the numerous pupils who studied under him. I would mention particularly two men who were pupils of Hunter, and who lived well on into the present century, who probably had in their day more influence upon surgery than any others.

In England, I mean, John Abernethy, who was born in 1764, and died in 1831. He was surgeon to St. Bartholomew's Hospital, where he succeeded Pott, the great St. Bartholomew surgeon who died at the end of the last century, and he certainly had a very remarkable influence upon the surgery of England in the early part of the century. The great point about Abernethy was his common sense, and the fact that he insisted upon it that surgery could not get on without attention to the digestion, circulation, and respiration of the patient. He believed firmly, as I do, in keeping the *primæ viæ* in good order, and it is said of him that the advice he was in the habit of giving to his patients was—he was rather rough—"Take my pills, and buy my book, and then you will know all about it."

The other man, who did a great deal for surgery in this country, and who was known in his day as the father of American surgery, was Philip Physick. He was born in 1768, and died in 1837. He took his degree at Edinburg in 1792, and studied under Hunter, as I have already said. He became surgeon of the Pennsylvania Hospital in 1794, Professor of Surgery in the University of Pennsylvania in 1805, and he was without exception the greatest surgeon of his day on this continent.

Of course, at the same time, there were eminent men on the continent of Europe, and I would just mention their names shortly. In Paris, Dupuytreu and Roux. In Germany, von Graefe and Dieffenbach, and later on, Billroth and Volkman.

Then in England we had a succession of men who carried on the traditions of the older surgeons, and I would just mention a few of them. Astley Cooper, who died in 1841; Benjamin Brodie, who died in 1862; William Lawrence, who died at a good old age, in

1867; Liston, who was cut off at a comparatively early age by aneurism, in 1847; James Syme, who died in 1870; William Fergusson, who died in 1877; and lastly, John Ericksen, whose work on surgery has been known throughout this continent as well as in England for many generations, as being the best text-book on surgery, who died only last year.

In this country, of course, surgery is making progress, and I would just mention a few names that I believe represent the progress of surgery here. There was John Warren, first Professor of Anatomy and Surgery at Harvard in 1783, who died in 1815. There was his son, John Collins Warren, who died in 1856; that is ten years after he had done the first operation under anesthesia. There was Philip Physick, who died in 1837; Pancoast, in 1882, who was surgeon to Jefferson Medical College; Ephraim McDowell, whom I have already mentioned as the father of ovariotomy, who died in 1830; Valentine Mott, in 1865, and he is to be remembered as the man who, in 1818, first tied the innominate artery; Bigelow, who died as lately as 1890, who wrote a valuable paper on anesthetics in 1846, but whose name is remembered principally in connection with his work on the hip, and you will remember that he completely altered our views with regard to dislocation of the hip, and also that operation which I have already referred to, namely, rapid lithotrity, or lithotapaxy. Then I come to Samuel Gross, whom I knew personally when he visited England, who was a charming, patriarchal old gentleman, who died in 1884.

And now, standing as I do, in the hall which has been erected, as that tablet shows, to the memory of Elias Cooper, I would just mention his name as being one of the eminent surgeons, who lived only from 1823 to 1862, and who in 1855 removed to San Francisco, and in 1858 was one of the founders of the Medical Department of the University of the Pacific. He was professor of anatomy, and also of surgery, and he distinguished himself by various prominent operations. He twice tied the innominate artery, and one of those cases was as nearly as possible a success; I mean that the patient lived for some weeks afterwards, and all but recovered, but at last an unfortunate hemorrhage occurred. Cooper performed cesarean section twice, and also, frequently, ovariotomy.

And now, as I am speaking here at San Francisco, I cannot forbear to say a word with regard to the gentleman to whom we are indebted for the place in which we meet to-day. I mean that Dr. Levi Cooper Lane has conferred not merely upon this city, and upon the inhabitants of this city, but has conferred upon surgery generally throughout the world a very great benefit by his action in putting up this splendid building in which we are assembled, and also by founding the adjacent hospital, which seems to me to be, as it were, an example of what a hospital should be in every particular. I know of no instance throughout the world of a medical man devoting his substance in the way that Dr. Lane has done to the purposes of charity. In London we have a large hospital called Guy's Hospital, and it was the result of the benefaction of a bookseller two centuries ago, whose name was Guy, who, something like Dr. Lane, devoted not merely his wealth, but also his time to founding that charity which bears his name. It is true that we have at Oxford the Radcliffe Infirmary, but I do not think that Radcliffe left any money at all to it. Radcliffe was a benefactor, no doubt, to his profession, because he established those extremely valuable traveling fellowships, as they are called, which still exists at Oxford.

As, I say, I know of no example in England, except Guy's Hospital, where one individual has, out of his own funds, built and endowed a large charity such as we have here. I think Dr. Lane is to be congratulated that he has lived long enough to carry out his views, and that he has had the pleasure of seeing his work completed. I trust that it may be many years before he will be called away, and that he will have the satisfaction of seeing this institution making even greater progress than it has yet done. But if anyone were to ask me what is the best monument of Dr. Lane, I would say, as was said of Sir Christopher Wren, the architect of St. Paul's:

Si monumentum requiris circumspice.

CONSERVATIVE OPERATIONS UPON THE UTERINE APPENDAGES, WITH ILLUSTRATIVE CASES.

Read before the San Francisco County Medical Society.

By J. Coplin Stinson, M.D., San Francisco, Cal.

In deciding on an operation for the removal of an ovarian cyst we should proceed upon those lines by which the cyst can be extirpated without sacrificing the ovary. Until recently, ovarian cysts and cystic ovaries were treated by oöphorectomy. I believe that where it is possible we should avoid removing any portion of ovarian tissue which appears normal, even though the portion remaining be small. Resection and plastic operations should be practised in women when pregnancy is liable to occur, and delivery at term can be conducted with safety. We should endeavor to cure our patients without depriving them of their menstrual function, as sometimes the symptoms which follow double oöphorectomy are more taxing than those which were present before the operation was performed. In looking over my lists of cases in which I operated, or assisted in an operation for an ovarian cyst or cystic ovary, while House Surgeon at the Post-Graduate Hospital, New York, during 1893 and 1894, I find they number 78; of these 21 were ovarian cysts; 5 were dermoid cysts (one double); 52 were cystic ovaries. Salpyngo-oöphorectomy was performed for the ovarian and dermoid cysts, and for 31 of the cystic ovary cases, while in the other 21 cases excision and plastic methods were employed. As the majority of these plastic or conservative operations were performed by Dr. A. Palmer Dudley, of New York, I take pleasure in making some excerpts from a paper[1] recently published by Dudley, on "Conservative Surgery upon the Uterine Appendages." He reported 65 cases in which conservative methods were employed. Of these pregnancy followed in ten. Six children were born at full term; three miscarried; the first by injecting the uterus with hot water; the second by injuries received from a kick; in the third case the history was doubtful. The tenth pregnancy is still going on. Dudley further states that he was not able to trace all his cases, but has no doubt if all were traced he would be able to record a much larger number of pregnancies.

In this connection, I may quote from another authority on conservative pelvic surgery, Mathaei, who reports[2] "Six cases of ovariotomy with resection of the opposite ovary, five of the patients subsequently conceiving and bearing living children." The following cases are reported as presenting several points illustrating conservative operations on the ovaries:

CASE I.—X. X——, age 35, married; well, up to birth of last child, which occurred in 1891. The labor was difficult, and she was confined to bed for several weeks. After which she began to complain of headaches, backache, poor appetite, constipated bowels, profuse menstruation, vaginal discharge, which later became excessive, and pains in the pelvis. Her health became poor, she began to have neuralgic pains in the neck, arms, and legs, and at times hysterical attacks. She entered the Post-Graduate Hospital, New York, on July 12, 1894. Examination showed dilated stomach, relaxed abdomen, tenderness over the epigastrium and right side of the pelvis, slight laceration of the perineum, double laceration of the cervix, endometritis, retroversion of the uterus with adhesions, right ovary prolapsed and tender to the touch. I operated, under ether anesthesia, with the assistance of Dr. A. C. Carpenter, of New York. The endometritis, lacerated cervix and retroversion with adhesions, received appropriate treatment. A median incision two inches long was made above the pubes, dividing the skin, subcutaneous tissues and fascia. The peritoneum was opened and two fingers were introduced. The fundus was located and the adhesions separated. The right ovary was also bound down by adhesions which were separated. The ovary and tube were brought into view, and the latter found patent. There were several cysts the size of a hickory nut in this ovary. These were evacuated and cut away with scissors. The raw surface where the ovary had been adherent was also excised, and the cut edges of the ovary sutured with fine silk. The left ovary and tube were examined and found normal. The pelvic cavity was sponged out and the abdomen closed in separate layers with chromicized catgut sutures without drainage. Recovery was rapid. On the third day the temperature rose to 103° F. The dressings were removed, and at one point where there was some tenderness and redness the edges of the wound were slightly separated, about ℥ss of pus escaped, and a small strip of gauze was introduced. Repair was complete in two weeks. She left the hospital August 17, 1894. Last report about two years afterwards. Feels well; digestion fairly good. Complains of no pelvic symptoms.

---

[1] American Gynecological and Obstetrical Journal, February, 1897.

[2] Zeit. f. Gebartsh. u. Gynäk; Bd. xxxi, H. 2.

CASE II.—X. X——, age 30, married. Has always complained of painful menstruation. In 1894 had a miscarriage, from which she made a slow recovery. In 1895 she fell from a bicycle, her side striking against a car track. She complained of pains in the abdomen and pelvis, worse on the right side of the pelvis. She now began to have more pain with the menstrual attacks, backaches, more pain in the pelvis, worse on walking, and some vaginal discharge. In 1895 she was treated locally for a while, and later the cervix was dilated to relieve the painful menstruation. This relieved her somewhat, but she was soon as bad as ever. I saw her June 7, 1897. She was rather pale, and looked careworn, but her general condition was fairly good. She complained of backache, pains across the lower abdomen and in the pelvis, more severe on the right side. There was some vaginal discharge, and menstruation was always painful. Examination showed tenderness over the lower part of the abdomen, more on the right side of the pelvis; cervix low in vagina; fundus uteri slightly enlarged, retroverted, drawn over to the right side of the pelvis and fixed by adhesions; ovaries enlarged and tender to the touch; tubes apparently normal. Examination under chloroform, two days before the operation, confirmed the above. On June 13, 1897, I operated; chloroform being administered by the drop method. The dysmenorrhea, endometritis, retroversion, with adhesions, and the prolapse of the uterus, received appropriate treatment. An incision two inches long was made above the pubes dividing the skin and fascia; blunt division of the left rectus was made, and the peritoneum opened. On account of the depth of the fundus uteri and the adhesions fixing the organs, I found it necessary to enlarge the incision slightly, the entire length being 2¾ inches. The fundus was found drawn over considerably to the right side of the pelvis. The adhesions were separated by the fingers, after some difficulty, and the fundus drawn into view with a pair of double tenaculum forceps. The right ovary and tube were examined; the tube was normal; the ovary contained a cyst the size of a large walnut. This was evacuated, about ʒv of serous fluid escaping. It was then excised, and the cut edges of the ovary united with continuous sutures of fine chromicized catgut. The ovary was now about one-third the normal size. The left ovary and tube were next examined. The tube was normal; the ovary contained a cyst slightly larger than that on the right side. The cyst was evacuated, removing about ʒvi of serous fluid, then excised and the cut edges of the ovary united with catgut sutures. These are the largest cysts I have operated upon, or have seen operated upon, in which the cysts were excised and plastic work done on the ovaries. The pelvic cavity and the *cul-de-sac* were sponged out and the abdomen closed without drainage in separate layers with continuous sutures. Fine chromicized catgut was used for the peritoneum, chromicized tendon for the muscle and fascia, and very fine silk for the skin. Convalescence was uninterrupted, except for an attack of catarrhal icterus, which showed itself shortly after the operation. The jaundice had nearly disappeared two weeks after the operation. The wound healed by primary union. The silk stitches were removed on the sixth day, and aristol collodion applied. She was allowed to get up on the thirteenth day, and all the dressings were removed in the third week, when she was permitted to go around without any bandage or support. The patient was last seen Sept. 27, 1897. She has menstruated regularly since the operation, and there was no pain or discomfort. Her general condition was good. Has no pain or other symptoms referable to the abdomen or pelvis.

These favorable results show that conservative, or what I think would be better called scientific pelvic surgery, should be more frequently employed, as we can cure our patients without interfering with the physiological actions, relations, and uses of their pelvic organs.

320 Kearny street.

THE UPPER AIR TRACT IN HEALTH AND IN DISEASE.

By Wm. Ellery Briggs, M.D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

The nasal cavity has manifold functions, and in order that it may perform its full duty, it must be in a reasonably healthy condition. The importance of the upper air tract in its relation to the general health, and especially to the integrity of the lower air passages, has, until recent years, been practically ignored, and, even at the present day, is recognized by far too small a number of physicians.

Inspired air varies so greatly in its moisture and in its temperature, and contains so much mechanical dust and such infinite numbers of pathogenic germs that it would be highly injurious to the lung cells were it taken into them in its unprepared condition. When the nasal cavity is diseased, one or more of its important functions are improperly performed, and a secondary affection in some distant organ may take place.

Physiologists have variously estimated the quantity of water taken up by the inspired air at from 5,000 to 7,500 grains daily. This water comes almost entirely from the nasal mucous membrane, assisted by the natural reservoirs, the turbinated bodies. This is a very important function, and the integrity of the lungs depend largely upon whether the air entering them is properly moistened. Air taken into the lungs, habitually through the open mouth, always has a deleterious effect upon the lower air tract. Air inhaled through a normal nasal cavity is charged with water almost to complete saturation.

Another function of paramount importance is the proper warming of the inspired air, which is brought up to about 86° F. The heat is derived mostly from the blood in the nasal mucous membrane and in the so-called erectile tissue of the turbinated bodies

The dust is removed from the inspired air by being deposited upon the moist mucous membrane of the nasal cavity.

We have learned, within recent years, that the healthy nasal mucous membrane performs another very important function, namely: that its secretion has the property of destroying pathogenic germs. The germs of most epidemic diseases are conveyed through the air and are most likely to multiply and be taken up into the general circulation when they are deposited upon a diseased mucous membrane.

It seems evident that those whose nasal cavities are healthy are less likely to contract epidemic diseases than those whose membranes are in a state to propagate disease germs. I believe that it will be demonstated ultimately, that the difference in susceptibility of people to epidemic disease, depends largely upon the condition of their upper air passages.

In cases of atrophic rhinitis, a great variety of germs are found in the secretion which are not present in the normal fluid. It is generally recognized fact that those who suffer from hypertrophy of the pharyngeal and faucial tonsils and general catarrhal troubles are particularly susceptible to tubercular disease. Is it not reasonable to conclude that this is due to the lack of disinfective power of the diseased membrane? I believe this also applies to diphtheria, scarlet fever, measles, and many other germ diseases. The sense of smell, which was formerly considered to be the important function of the nose, is the least of its numerous duties.

Being convinced that a healthy upper air tract is of the utmost importance in maintaining the integrity of the lungs and more distant organs, we must now consider the best means of securing the desired result. The most rational manner of insuring a healthy nasal cavity, is by preventing it becoming diseased. To do this absolutely would require power which no physician possesses. It would be necessary to control the ancestors of the patient for a few generations, as well as climatic conditions, which no human agency can influence. It is true, however, that by rigid and intelligent hygienic measures a large percentage of these ailments can be averted. It seems to me, therefore, that it is the duty of the physician to give his patients the necessary information to guide them in attaining this very desirable object.

Have any of you carefully observed the smaller children on their way to school on a cold, wet, winter's day? One who notices will see many of them unprotected against rain, scantily clad, and without flannels, so that with wet feet and damp clothing, they will sit for several hours daily in badly ventilated, poorly heated, and draughty rooms. One wonders that under such criminally ignorant and careless management, any of them survive the ordeal. That nearly all such children have some disease of the upper air tract, is a fact that experience abundantly proves. Extended examinations by competent and careful observers, has shown the almost universal existence among such children of adenoid vegetations, hypertrophied turbinated bodies, enlarged tonsils, or some form of rhinitis. The stenosis of one or both nostrils from repeated colds tends to produce deflection in the septum, and the growth of spurs from its surface. The baneful habit of picking the nose, which is natural to children suffering from any nasal disease, also tends to deflect the septum and cause other intra-nasal disease.

Middle ear disease is nearly always produced by extension of trouble already existing in the nasal cavity. This fact alone should be sufficient to arouse parents to the necessity of using every possible precaution to prevent their children taking cold. It would seem that no effort on the part of the parent would be too great if thereby they can prevent the occurrence of these serious diseases and their many complications. By careful advice to intelligent parents, physicians can do much to improve the hygienic surroundings of children.

Children should wear flannel next their bodies during all the year. The thickness may vary according to the season's temperature. During the damp and cold weather, two thicknesses of flannel should be worn by small and delicate children, and by grown people who are feeble and predisposed to catarrhal troubles. During the warmest part of some of our hot summer days, even the flannel might be laid off, but it should be replaced before the cool of evening.

In California, a great deal of catarrhal trouble is produced by the marked change between the day and night temperatures. People dress for the heat of the day and make no change in clothing when a fall of thirty or more degrees in the temperature takes place. If a child is dressed to be comfortable in a temperature of one hundred degrees F., it is imperative that more protection be given when the temperature, a few hours later, is sixty-five or seventy.

Women and children frequently suffer from catarrhal troubles on account of the scanty protection afforded the lower part of the body. The feet must be well protected from the chilling effects of damp, cold ground.

The kind of bath that is suited to each individual is of great importance. Those who can stand the cold bath should accustom themselves to it as a daily function. The process of training should be commenced by taking a cold sponge, extending only to the neck and shoulders, then gradually increase it until one can get into a cold tub each morning. It should be inaugurated during the summer, as there is then much less shock and discomfort than in cold weather. Salt added to the bath is of undoubted advantage. In the winter the bath should be taken in a well warmed room, free from draughts. Upon emerging, the body should be vigorously rubbed with a Turkish towel. The exercise and the friction bring the blood to the surface and prevent "taking cold." It is a frequent experience to find that people who were always chilled by night air, and who took cold on the least exposure, become so hardened by the daily cold bath, that they were almost free from such attacks. People usually have the temperature of their baths too high and thereby increase the susceptibility to colds. The Turkish bath is not generally useful, but may be resorted to for special reasons.

The temperature and ventilation of the sleeping apartment is an essential consideration. More colds are taken on account of too little than on account of too much change of air in the bedroom. Sleeping in a warm and vitiated atmosphere makes one sensitive and the power of resisting disease is thereby reduced. The beneficial effect of fresh air is very manifest when people who have been accustomed to sleeping in close apartments take a summer camping trip. They become less sensitive and less subject to catarrhal troubles. The sleeping room should, therefore, be so arranged that external air can have free access, except in damp and foggy weather. Draughts should be avoided, both in sleeping and sitting rooms.

Undoubtedly contagious diseases might often be averted by cleansing the upper air tract with some mild antiseptic solution. This precaution should never be neglected in children who have been exposed to diphtheria, scarlet fever, etc. After intranasal operations, exposure to contagion should be carefully avoided, as the field of operation gives ready access to disease germs. The fact that people with normal nasal secretion stand intranasal operations with so little danger, is attributable to the fact that the secretion retards or prevents the growth of disease germs. There can be no question that intranasal operations are hazardous when the secretion is abnormal.

The healthy tonsil is, to a certain extent, protected by leucocytes, but when it becomes diseased, it is a ready channel for the admission of pathogenic germs to the system. The faucial and pharyngeal tonsils are the most frequent highways by which tubercular and other infection reaches the glands of the neck. The fact that hypertrophied faucial tonsils make children more susceptible to contagions, is becoming quite generally recognized, even by the laity. It seems to me that the faucial tonsils or adenoid vegetations are even more likely than the pharyngeal tonsil to be the nidus for the propagation of disease germs. There are so many good reasons why children should not be allowed to grow up with either of these abnormities, that it is strange more attention is not paid to them by the profession in general.

The fact that the first symptom calling attention to so many contagious diseases, is some departure from health in the upper air tract, as coryza or pharyngitis, gives strength to the view that they are contracted by the deposit of the specific germs upon the membranes of those passages. Acute nasal symptoms are the first condition calling attention to small-pox, varicella, measles, scarlet fever, whooping cough, and influenza. In diphtheria, scarlet fever, and some others, the nasal mucous membrane becomes extensively diseased, and middle ear complications are deplorably common.

Erysipelas, if carefully observed, will be frequently found to start from the nasal orifice in patients subject to some chronic nasal disease.

Asthma is a common result of intranasal disease. Polypoid growths are the most frequent cause of reflex asthma, but other conditions may produce it.

Digestive disorders are not infrequently the cause of throat and nasal disease, and the latter in their turn may set up disturbance of the gastric functions. The constant swallowing of quantities of abnormal secretions from the throat and nose must have a deleterious effect on the digestive organs.

Headaches are the manifestations of so great a variety of disorders that they often tax the skill of the physician to the utmost to discover the pathological condition giving rise to them. They are often treated as a functional disturbance, when a careful search would reveal the pathological condition at the foundation of the symptom.

During the past few years it has been generally accepted that many headaches are due to eye-strain, and accordingly the opticians are reaping a rich harvest. To listen to some enthusiasts you would be led to believe that the eyes were almost the only source of headaches. But there are many other causes, and one that is very common is intranasal disease.

Some rather narrow-minded specialists would have us believe that 80 per cent. of head pains are caused by intranasal disorders. It seems to be difficult for medical men not to become enthusiasts in some direction, and to refrain from distorting evidence to suit their peculiar views. It will not be possible to state with any degree of certainty what percentage of headaches arise from intranasal disease, but every physician of experience is aware that it is a frequent cause. The nose and the accessory sinuses should, therefore, be carefully investigated in cases of head pains in which other conditions do not fully explain the symptoms.

The pressure exerted by a deflected septum, or a spur, adenoid growths, hypertrophied turbinated bodies, or an acute rhinitis, may so disturb the cerebral circulation as to cause almost constant headaches. It is not an infrequent experience to have patients upon whom one has operated for adenoids, mention the fact that they previously suffered from constant headache, and that they had been relieved of this symptom by the operation. The removal of spurs and deflected septums also often cures cases of intractable neuralgia and head pains.

It is not always possible to tell whether a certain intranasal condition is the cause of a head pain. The only proper course, therefore, to pursue is to place the nasal cavity in as healthy condition as treatment, operative or otherwise, can make it, and then await the result. In some cases the effect will be almost magical, though it is also true that in others no benefit will be observed.

429 J street.

AN EXCEPTIONAL CASE OF PAROTID GLAND DISEASE.

By R. T. Stratton, M.D., Oakland, Cal.

Read before the Alameda County Medical Society.

With the exception of syphilitic and possibly tubercular disease of the parotid gland, the knife is so generally depended upon for the relief of the various chronic enlargements of this structure, that the presentation of the following case, in which an apparently surgical affection was cured medicinally, will prove of value in again arousing a hope for the therapeutic relief of a larger proportion of those conditions which have commonly been relegated to the sphere of surgery. It will, I hope, also prove helpful in tending to enlarge the field of usefulness of a well-known therapeutic agent.

The difficulties and disabilities attending excision of the parotid gland, or any considerable part of it, will cause to be welcomed a less heroic method of cure than that which surgery offers, even if it be only in a small proportion of those non-malignant affections of this organ to which, of course, the method pursued in this case can alone apply.

George L——, aged 12 years, of American parentage, with no known family or personal history of syphilis, had a paternal grandmother die of tuberculosis, and two sisters and a brother die under one year of age of "cold," inflammation of the bowels and pneumonia, respectively. About the middle of March, 1897, he had bilateral parotitis. On the left side the swelling entirely disappeared in about three weeks, but on the right, although it diminished to such an extent that the enlargement was no longer visible, yet palpation revealed some increase in size. About this time the gland began to enlarge, and continued to do so, gradually, until early in August, when the tumor again became visible. During the two months previous to October 9th, when the case came to my notice, the swelling had increased at a more rapid rate, and two weeks before that date the lower eyelid on the corresponding side had become inflamed. I found pronounced enlargement of the entire gland, giving an appearance of marked deformity to the face. Enlargement of the posterior and inferior portions of the gland which dips down behind the ramus of the inferior maxillary bone was noted. The gland was of an even, moderately firm consistency throughout, with the exception of the upper part of the pre-auricular portion which was more distinctly lobulated than the rest and of more elastic firmness. Palpation revealed no evidence of fluid. The overlying skin was movable, as were also such parts of the gland, as could be palpated upon the structures beneath. The tumor was not painful, nor was there tenderness on pressure.

The palpebral conjunctiva of the lower lid of the right eye on eversion presented an area, approximately one-fourth of an inch square, of pale granulations, raised above the conjunctival surface. The ocular conjunctiva in apposition with this was inflamed. A number of cervical lymphatic glands on the same side were enlarged. The child was anemic.

The impression given was that we had here to deal with a malignant growth. The age of the patient, his anemic state, the ocular disease, the lymphatic enlargement, and the rapid growth of the tumor during the last two months, notwithstanding its mobility and painlessness, seemed to warrant a tentative diagnosis of sarcoma. It was realized, however, that the microscope alone could establish the diagnosis, and that in the event of it proving malignant, considering the extent of the disease, operation would prove futile. Accordingly the removal of a small portion of the gland for microscopic examination was advised.

Pending a delay in effecting this, I prescribed internally syrup of iodide of iron, and locally the official ointment of the red iodide of mercury, the application of the latter to be followed by exposure of the parts to the sun for a period of one hour. This was to be repeated daily until the skin should become inflamed, when longer periods should intervene between the use of the ointment. The success which had attended the application of this method in my practice to the possibly somewhat analagous condition of hypertrophy of the thyroid gland, suggested its use in this case, but I acknowledge, with no hope of benefit. An astringent application was made to the ocular complication.

On the 16th, five days after treatment was begun, there was a noticeable diminution of the size of the gland, and the part remaining seemed softer. On the 26th there remained only a remnant posterior to the ascending ramus of the jaw, and also in the upper part of the pre-auricular portion of the gland. The eye was greatly improved, as well as the general health of the patient.

The ointment had been applied from the first with very gentle friction, so that massage can be no material factor in the remarkable improvement.

It is to be regretted that the diagnosis of the exact nature of the enlargement must necessarily remain in doubt.

911 Market street.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal., and

WM. FITCH CHENEY, B.A., M.D., Adjunct to the Chair of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal.

Psoas Abscess following Confinement.—DR. W. C. WOOD reported a case with the following history: The patient, a woman, 26 years of age, was first seen by him April 4, 1896. Health excellent until her only confinement, which occurred March 14, 1896, 22 days before admission to St. Mary's Hospital. Labor was difficult, forceps being used. Fever, prostration, and pain in left side of abdomen. No abnormal discharge from vagina. Left leg became drawn up. Rheumatism and hip-joint disease diagnosed by two physicians. Examination showed the patient to be thin and anemic. Abdominal tumor about 5 inches long by 2 inches broad at site of sigmoid flexure. It was hard, immovable, and tender, and could not be felt from the vagina. The uterus was large and soft. There was no peritonitis or discharge. The joints were normal, except the left hip. Here all normal motions were present, except extension, which was limited to 130°. High enemas failed to affect the size of the tumor. The bowels were regular. Temperature, 100° to 103° F. A diagnosis of an inflammatory tumor in the psoas muscle was made. Operation, April 8th. A 3-inch abdominal incision was made along the outer side of the left rectus muscle. A retroperitoneal fluid tumor was found. The peritoneum was then sutured, and from the center of this incision a perpendicular incision was made toward the anterior superior spine. This incision was carried down to the peritoneum. The peritoneum was stripped back from the iliac muscle and fascia. On reaching the site of the tumor about four ounces of pus were obtained. Free drainage by gauze and two tubes were introduced. The patient made a good recovery; temperature normal in one week. Flexion of the thigh began to subside, and the wound healed May 30th. Thigh, 160°. On walking extension became normal, and on June 26th the patient was discharged, walking without a limp, and in good general health.—*Brooklyn Medical Journal—North American Practitioner*, September, 1897.

Gavage.—JOHN W. BARTOL says that the infant, like the adult, often has in its moribund conditions of body and mind a certain distaste for nourishment of any kind, but, unlike the adult, is not able to call to its aid the power of will so often essential for the obedient execution of the physician's directions. It is obviously our duty to feed these patients against the will. In another class of cases there is a certain type of obstinate vomiting, the children taking food readily enough, but being unable to retain it even in small quantities. It will often be found in these cases that the reflex vomiting is less liable to be excited by the passage of the tube than by the food itself taken in the natural way; in some of these instances, in which there is a prospect of steadily advancing failure, the trouble may be tided over until a slight gain in tone enables the patients to resume their normal habit.—*American Journal of Obstetrics—North American Practitioner*, September, 1897.

Vaginal Irrigations.—In an editorial in the *Annals of Gynecology and Pediatry* for September, the following occurs: Irrigations of hot water at 104° to 122° F. act by the heat, which increases the circulation of the pelvic viscera.

At a temperature of from 104° to 112° F. they have vaso-dilating action, while at a temperature of 112° to 122° F. they cause constriction of the vessels. The latter temperatures are indicated in certain forms of metritis, especially the *atrophic* type when due to a prolonged lactation, or to early menopause in stout subjects. In these cases the hot vaginal douche will regulate the uterine functions and the menses. Hot irrigations are of considerable value in chronic metritis, with a hard uterus, due to venous stasis, and by their use the symptoms disappear, menstruation becomes more abundant, and the mucosa takes on its normal rose color. In metritis of puerperal subinvolution they cause a retraction of the enlarged organ, as well as a mucous transformation of the bloody lochia. In the above-mentioned conditions it is often well to increase the effect of the irrigation by the addition of slightly irritating substances, such as the chloride or carbonate of sodium; but what is still better, is a teaspoonful or two of the plain tincture of iodine to every quart of water. But under no circumstances should we use antiseptic substances properly speaking, because they cause changes to occur in the epithelium and bring about absorption by the mucosa, whose power of absorbing is greatly increased by heat. Hot injections of 112° to 122° F. act remarkably well in cases of chronic periuterine inflammation, as well as in peri- and para-uterine exudations. Combined with rest, these exudations may become absorbed, and many cases are cured that at first might have appeared to be only suitable for surgical interference. In such conditions the irrigations must be used in large quantities, at least two quarts morning and night If the patient is not sick enough to be confined to bed, she should be instructed to remain on a sofa for two hours after each injection. It sometimes happens that the irrigation will make the pain worse, a fact which indicates that there is a recent, non-encapsulated pelvic exudation, often containing very virulent bacteria, and if this is present, the irrigations must be immediately stopped for a certain lapse of time. The same applies when the pain increases in cases of pelvic abscess, or para- or peri-uterine origin with an acute or febrile evolution.

Night Terrors.—BRAUN, after critically discussing the existing theories on *favor nocturnus* in children, declares it to be a disease by itself, which is closely allied to the conception of neurasthenia, *i. e*, "an irritable weakness." Following this, a description of the characteristics of the attack and their demonstration is given. The sudden jumping up of the infant out of its sleep—symptomatic, especially in colic—has no relation to night terrors. The etiology, as well as the treatment, is that of neurasthenia, and the latter should be pointed in the direction of nutrition and education.—*Der Kinderarzt—Pediatrics*, September, 1897.

SURGERY AND ANATOMY.

By T. W. Huntington, B.A., M.D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal., and
Geo. B. Somers, M.D., San Francisco, Cal.

The Circular Bandage.—DR. GEORGE HENRY FOX has called attention to a system of bandaging by means of separate, short circular bands, 2 or 3 inches wide, made of elastic webbing, and fitted to the limb much after the manner of broad garters, one above the other, and slightly superimposed. They are recommended on the ground of cleanliness, cheapness, convenience, and adaptability to the needs of the average patient. They are particularly useful in varicose extremities.—*New York Medical Journal*, May 1, 1897.

Hopeless Cases of Cancer.—ROSWELL PARK maintains that one has a right to operate in absolutely hopeless cases, for either one or more of the four following reasons, providing the patient willingly consent. These are: (1) The relief of pain. (2) The avoidance of constant hemorrhage. (3) The affording of a temporary respite. (4) The removal of foul sloughing growths, which are an offense alike to patient and family.—*Medical Record*, July 3, 1897.

Treatment of Colles Fracture.—DR. E. A. TRACY, of Boston, formulates the treatment of this fracture as follows: (1) Reduction not always easy. (2) Protection, by a simple retentive appliance, while correct reunion of the bones takes place. (3) Passive motion of the fingers and thumb from the first day, of the wrist carefully from the fifth day.—*Virginia Medical Semi-Monthly*, June 25, 1897.

Position of Kidneys.—In 151 *post-mortem* examinations DR. GEORGE BREWER found the upper limit of the right kidney opposite the eleventh rib in 78 cases; opposite the twelfth rib in 62 cases; one-half inch below the twelfth rib in 1 case, and one inch below the twelfth rib in 8 cases; uncertain in 2 cases. The upper limit of the left kidney was found opposite the tenth rib in 1 case; opposite the eleventh rib in 100 cases; opposite the twelfth rib in 43 cases; one-half inch below the twelfth in 2 cases; three-fourths of an inch below the twelfth in 1 case, and one inch below the twelfth rib in 2 cases. The left kidney was congenitally absent in one case.—*Medical News*, July 31, 1897.

Marmorek's Serum.—In a review of the status of this serum DR. ROBERT F. WEIR concludes as follows: (1) The antistreptococcic serum of Marmorek has some good effect in erysipelas, and probably in scarlatina. (2) It is yet to be proved as valuable in puerperal septicemia, the present testimony leaning against its efficacy in such infections. (3) It is worthy of a further test in cellulitis, osteomyelitis, and surgical peritonitis (*i. e.*, non-uterine), in which experience is yet lacking, and in which the originating or associated germ is often the streptococcus. Further, that the dosage should be much increased, say up to 60 to 150 cubic centimeters *per diem*, in which doses it can be considered as a fairly safe remedy.—*New York Medical Journal*, June 12, 1897.

What Produces and What Prevents Ankylosis of Joints.—DR. A. M. PHELPS arrives at the following conclusions: (1) That a normal joint will not become ankylosed by simply immobilizing it for five months. (2) That motion is not necessary to preserve the normal histological character of a joint. (3) That when a healthy joint becomes ankylosed, or its normal histological character changed, it is not due to prolonged rest, but to pathological causes. (4) That immobilizing a joint in such a manner as to produce and continue intra-articular pressure will result in destruction of the head of the bone and the socket against which it presses. (5) That atrophy of the limb muscles will follow prolonged immobilization of a joint. The question of ankylosis is determined by the severity and duration of the inflammation, the presence of intra-articular pressure, the subsequent cicatricial contraction of soft parts around the joints, the tissues involved, and the amount of destruction of bone and cartilage.—*Lancet-Clinic*, July 10, 1897.

Intravenous Saline Injections in Collapse.—After an operation by DR. LEONARD A. BIDWELL for intestinal obstipation, the following history is given: "The patient rallied well after the operation, and only vomited slightly. On the following day brandy, milk, and barley water were given by the mouth, and, as no flatus escaped on passing a rectal tube, an enema was ordered, but without any result, as the rectum was blocked with stony feces. About midday on the second day after the operation the bowels acted four or five times copiously without any further enema, and all the abdominal distension disappeared. The patient, however, became considerably collapsed, but rallied after champagne and hypodermic injections of strychnine. At 9 P. M. she became worse and appeared almost moribund; her pulse was small and flickering, and the skin was cold; she also vomited slightly. My house-surgeon, Mr. Pardoe, immediately injected four pints of normal saline solution into the median basilic vein; almost directly after this the pulse became firm and full, and there was no more vomiting. The further progress of the case was quite uneventful. When last seen, four months after the operation, she was in excellent health, and did not have any trouble with her bowels."—*British Medical Journal*, May 8, 1897.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Two Cases of Toxic Amblyopia from Iodoform.—DR. J. W. RUSSELL reports two cases of amblyopia in patients who were taking large doses of iodoform for phthisis. The first case was that of a man 32 years old, who had been taking iodoform in doses varying from 2 to 10 grains three times a day for nearly four months, when it was found that his vision was reduced to $\frac{6}{18}$. The iodoform was discontinued, and two months later, without other treatment, the vision became normal. The second patient, a man 26 years old, took iodoform for four months, in doses varying from 1 to 10 grains, three times daily. He then noticed difficulty in reading. His vision was found to be $\frac{5}{20}$ in each eye. The color vision was normal; the right field was normal; the left slightly contracted; the discs were pale, but not atrophied. The amblyopia in this case differs from tobacco amblyopia, in that there is no central scotoma. Three months after the iodoform was discontinued the sight had returned to normal. There have been three cases reported by other observers. In view of these cases the author suggests that before giving iodoform one should test the vision and keep close watch of the patient's sight, and in case any diminution of the visual acuteness takes place then the drug should be promptly stopped. All the cases thus far reported have acquired normal vision a few weeks after discontinuance of the iodoform.—*Lancet*, June 12, 1897.

Amaurosis following Intranasal Operation.—DR. FRANCIS R. PACKARD reports the case of a man, aged 36 years, who had previously been treated for hypertrophic rhinitis by the galvano-cautery and the cold-wire snare. The author removed some small pieces of hypertrophied tissue from the left middle turbinated body. The same day, following the operation, the patient became suddenly blind in the left eye. This condition lasted about thirty minutes and then passed away. Ophthalmoscopic examination did not reveal any condition in the eye to account for the blindness. The patient had undergone similar treatment before, and has been operated upon a number of times since without any eye symptoms appearing. A number of cases reported by other authors are cited by the writer. The casualties have been classified as follows: (1) Of infectious origin—causing diffuse rhinitis, submucous abscess, diphtheria of the wound, conjunctivitis, otitis media, tonsilitis, faucial erysipelas, meningitis, arthritis, pyemia, unclassified infections, post-operative scarlatina. (2) Of nervous origin—causing neuralgias, migraines, syncope and vertigo, visual disturbances, asthma, laryngeal spasms, exophthalmic goiter, general depression.

(3) Of mechanical origin—causing nasal hemorrhage and permanent redness of the nose. Meningitis may be the result of metastasis or of direct extension of an inflammation of the nasal mucous membrane. The cases reported have always been fatal. The visual disturbances are commonly of the nature of nervous complications. A case of exophthalmic goiter was reported by Lemon. Several cases, in which hyperemia of the disc and fundus was observed, have been reported. Many other curious complications have been noticed. But some rhinologists, with large experience, have never seen any serious results from galvano-cauterization of the turbinated bodies when due care is observed in manipulation of the instruments.—*Medical News*, October 9, 1897.

Euphthalmin a New Mydriatic.—DR. B. TRENTLER, after testing the value of euphthalmin, formulates his conclusions as follows: (1) The subjective disturbances caused by dropping of solutions of eupthalmin are slight and of short duration. (2) Euphthalmin is a strong mydriatic. It takes about the same length of time for a 5 to 10 per cent. solution to dilate the pupil to its maximum that is required for a 1 per cent. solution of homatropine. (3) It is less active and prompt in old than in young people. (4) It has the advantage over cocaine, as a mydriatic, because it acts more energetically and does not affect the corneal epithelium, but the mydriasis is less prompt. (5) The accommodation is less affected by euphthalmin than by homatropine. (6) The pupil and the accommodation return to their normal condition more promptly than after the use of homatropine. (7) Thus far no unpleasant effects have been observed on the general system.—*Klin. Monatsblatter f. Augenheilkunde*, September, 1897.

Astigmatism in School Children.—DR. A. STEIGER, of Berne, concludes that unrecognized and untreated astigmatism has been the cause of a majority of the cases of weak sight, structural changes, and some errors of accommodation. The author had examined 1,200 eyes, mostly under seven years of age, before secondary troubles had time to develop. The conditions found were mostly congenital. There were 105 myopic eyes, 188 hypermetropic, and 777 astigmatic ones. Of these, 332 had between 2 and 3 diopters of astigmatism, and 300 had 3 diopters or more, a degree incompatible with high visual activity. Even when the power of compensatory accommodation is retained, unless the strain is relieved by cylinders, suffering and injury are certain to ensue.—*Corresp. Bl. d. Schweiz. Aertz.*—*Practitioner*, October, 1897.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

The Pathology of Syphilis.—EHRMANN records in the *Gesellschaft der Aerzte* his experience for 11 years in the investigation of syphilis. After tracing the labors of the older writers, he dwelt on the more recent investigations of Neumann, Kaposi, and Unna. He next confined his remarks to the initial infiltration and effects, which must be sharply defined from the secondary. The infiltration does not confine itself to one trunk or vessel, but affects several, while the efflorescence indicates a more diffuse distribution of the syphilitic virus. The clinical sclerosis is of a different character, and is confined to the fibrous tissue and lymphatics that give it a diagnostic importance, though excisions of these masses give us very little information. In the primary hardening the lymph and blood vessels are so equally infiltrated along their course, that it becomes difficult to charge the one or the other with the initial offense. In a good specimen no blood corpuscles, and very few leucocytes will be met with, while threads of fibrine are plentiful. The fine network of blood vessels around the infiltrated cord is always engorged. According to Auspitz's view, the virus is limited to the lymphatic vessels in its primary stage, and subsequently introduced to the circulation, this was rather negatived by these experiments, and the fact of finding only two cords of this nature on the dorsum of the penis. Now, in a good preparation, if the lymphatic vessels be traced outwards along the arteria pudenda, they will be found to terminate in a fine net of subcapillary vessels, or the *vasa nutritia*, which undoubtedly is the source of the infiltration. Again, cases are met with where these cords along the penis are not associated with the infiltration indicating absorption from the rich network of capillary blood vessels. We also know that the syphilitic virus can be easily absorbed by epithelial membrane, transmitted to the blood and finally taken up by the lymphatics from the plasma, as experienced in tattooing, where it first enters the fluids of the tissue, is next transmitted to the blood vessels and finally absorbed by the lymphatics.—*Medical Press and Circular*, July 7, 1897.

Lead Poisoning with Death from the Use of Hebra's Ointment.—HAHN has recently reported to the Society of Medicine in Prague a curious case in which a child suffering from eczema of the head was treated for a long time with Hebra's ointment. General convulsions ensued, the skin became very pale, the gums presented the characteristic blue line. The patellar reflexes were exaggerated. Finally the child died. The cause of death was confirmed by an examination of the child's body and an analysis of the urine.—*L'Abeille Médicale.—Therapeutic Gazette*, September, 1897.

Gonorrhea.—In a paper entitled "Genito-Urinary Points for the General Practitioner," DR. FRED. C. VALENTINE, amongst other things, says: Where is the practitioner who can afford to neglect clap? The unfortunately light manner in which many, I may say most of the laity view this disease, would stamp as ignorant a physician who dare refer a case of acute gonorrhea to a specialist. As clap is among the most dangerous of acquirable diseases, it is only just that general practitioners everywhere should treat it properly. Experience, study, and investigation, have led me to very decided views upon the subject. These are expressed in a paper wherein it is attempted to show that the general practitioner can successfully treat clap without internal medication, which does no good, and without hand injections, which must fail of their purpose in the majority of instances. As, however, the full details hereof have been discussed elsewhere, they need not again be detailed. There are, however, some points in connection with gonorrhea, regarding which I have been asked specific questions. Remembering that there are urethral discharges due to other microbes than the gonococcus and again to no microbes at all, a positive diagnosis is of transcendental importance. It is said that less than 75 per cent. of our general practitioners do not own a microscope, and that many who do, have no time to use it. Their needs can be easily supplied by letting the smallest possible quantity of the discharge in question dry between two cover-glasses and sending them to a colleague who is prepared for this class of investigation. While it is evident that in a small community clap is sufficiently rare not to warrant many men in engaging in microscopic work, it is difficult to conceive a locality maintaining a dozen physicians, with not one a fairly expert microscopist. In another paper, staining for gonococci is concisely described. It is mentioned here only in confirmation, as other methods before and since tested, have not proven as satisfactory as the esine-methylene stain. When is a gonorrhea cured? This question, now so often asked, speaks volumes in favor of the modern physician. The principal tests advocated are within the reach of all. First, a week after every vestige of discharge has disappeared, let the patient drink double the quantity of beer that he used before he was ill. If no discharge results in 24 or 48 hours, make an irritant injection of silver nitrate or mercuric bichloride, a week later. This will produce a discharge. Should it be free from gonococci, the patient's next sexual intercourse should be with a condom. If examination of its contents reveal no gonococci, the patient may be considered cured. Additional safety is then obtained by a urethroscopic examination. This, however, is specialist's work, and may be called for when the question of marriage or the persistent cause for shreds, filaments, flakes, or granules in the urine, requires decision.—*Clinical Recorder*, July, 1897.

Hydrozone and Glycozone in the Treatment of Gonorrhea.—DR. WARREN E. DAY, in a communication to the *New York Medical Journal*, Sept. 4, 1897, alluding to the fact that a correspondent had said "no antiseptic has been discovered that will destroy the gonococcus without doing injury to the mucous membrane," says: As I presume he is open to conviction, I submit the following report of three cases which I have successfully treated during the last few months with hydrozone and glycozone, which I consider not only harmless, but the most powerful healing agents that I have ever used in my practice of thirty-five years: *Case 1.*—A man called on me on June 20th, with gonorrhea of four weeks' duration, profuse discharge, micturition painful, and an acute burning sensation along the entire urethral tract. Pus sacs had formed in the canal, the meatus was inflamed, and the gonococcus was active, as determined by microscopical examination. I prescribed injections of one part of hydrozone and ten parts of sterilized lukewarm water, an ounce for each injection, four times daily. After two days I reduced the proportion to one part of hydrozone and fifteen parts of lukewarm water, and I directed glycozone mixed with an equal amount of glycerin, pure, to be injected on his going to bed. The diet was not restricted, but no stimulants were permitted. In two days no gonococci could be detected. The discharge was lessened, the pain and difficulty in micturition had ceased, and in twelve days the patient was well. Continence was imposed for two weeks. Doses of bromide of potassium and bicarbonate of sodium were administered from time to time in order to make the urine alkaline and quiet the patient. *Case 2.*—A married man had contracted blennorrhea from a woman who had the whites. The same treatment was ordered, and with such satisfaction that the woman also was brought for examination and treatment. Result, a cure in each case within three weeks. *Case 3.*—A man, 50 years old, contracted gonorrhea from a woman of the town. As the patient lived in the country, twenty miles out, no treatment was given until ten days after infection. Aggravated symptoms of gonorrhea were present, and there was chordee every night; the patient, to use his own expression, was "plumb wild." The hydrozone injections were ordered, one part to twenty, owing to the great sensitiveness of the urethra and the possibility of orchitis if a stronger injection was used, as there was a slight swelling of the testicles. The glycozone, diluted with equal parts of pure glycerin, was ordered at night. I also gave glycozone internally in medicinal doses, to allay a gastric disturbance due to nervousness. In this case the treatment was continued for twenty-five days. I sent my patient to his cattle ranch happy.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

Angina Pectoris Treated by Erythrol Tetranitrate.—DR. J. B. BRADBURY reports a single instance of the successful use of this remedy. The patient, a medical man, states that life was rendered infinitely more tolerable, and the potency of the remedy having been abundantly demonstrated, he took it steadily at about eight-hour intervals, in grain doses, as a prophylactic. For three days there was immunity from attacks, although some weariness and oppression would come on after a lapse of 6 or 7 hours after taking the tablets. By making use of four doses daily he hoped to "keep the foe at bay altogether." The initial fall of tension depends upon the mode of administration. If the formula—drug, 1 grain; alcohol, 1 drachm; water, 7 drachms—be used, the pulse-tension begins to fall in from 2 to 3 minutes; if given in pill-form and swallowed, the time is from 20 to 40 minutes; if taken in tablet-form and masticated, the time lies somewhat between the two, and the last-mentioned form is the best. The alcoholic solution sometimes irritates the stomach. This drug was not introduced for the purpose of replacing amyl nitrite and nitroglycerin in cutting short attacks which have developed, but only to replace them in preventing the onset of the attacks. This instance shows that it is capable of doing this much better than nitroglycerin, the best drug which we have hitherto had for this purpose.—*British Medical Journal—American Journal of Medical Sciences*, September, 1897.

Tussol in Whooping Cough.—REHN says (*Jahrbuch f. Kinderheilkunde*): The use of tussol in 60 cases of pertussis exerted in the majority of the cases a rapid and favorable influence in controlling the worst symptoms, chief of which are the number and severity of the paroxysms, the vomiting and the loss of appetite. The duration of the attacks under its use ranged from three to five weeks. The dosage employed was as follows:

1 year	0.05—0.10
2 and 3 years	0.10
3 to 5 years	0.25—0.50

The drug was administered in solution flavored with syrup of orange.—*Archives of Pediatrics*.

The Wet Pack in the Insomnia of Neurasthenics.—DR. G. RICHARD makes use of strips of flannel, 6 or 8 inches wide, and 5 yards long, which are rolled and wet in water at 95° F. in four minutes. These bandages are now rung out and applied to the patient. A double spica is made over the chest, neck, and shoulders, continued as a simple envelope over the chest and abdomen, and terminated as a double spica of the thighs. The patient is dressed in a flannel shirt, not only to preserve warmth, but as well to absorb excess of moisture. The bed is protected by rubber sheeting. The wet pack is retained for two, three, or four hours for from two to four days until the patient sleeps satisfactorily and free from nightmares. The inconveniences of this treatment are: (1) That it cannot be readily applied by the patient; and (2) that the bandages shall be too tightly or loosely applied. Patients should be particulary enjoined not to sleep during the day nor after meals, to arise early, and particularly to leave the bed on awakening.—*Revue de Thérapeutique—American Journal of Medical Sciences*, September, 1897.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

The Knee-Jerks in Diabetes Mellitus.—R. T. WILLIAMSON refers to BOUCHARD, who first pointed out that the knee-jerks may disappear in diabetes mellitus. In a paper published in 1892, he recorded the condition of the knee-jerks in 50 cases of diabetes mellitus; in one-half the cases both knee-jerks were absent. As regards the cause of the loss of knee-jerks in diabetes, the frequent association of pain, numbness, muscular tenderness, and cramps, points to an early peripheral neuritis; and a few cases have been recorded in which well-marked typical motor and sensory symptoms of peripheral neuritis have been present; also in a few cases examined pathologically, parenchymatous neuritis of the peripheral nerves (branches of the anterior crural) has been found. But frequently when the knee-jerks are absent there are no other indications of slight peripheral neuritis, and the peripheral nerves may be normal on pathological examination. He has examined the small peripheral nerves in 3 cases of diabetes mellitus, in which the knee-jerks were absent—in 2 cases the branches of the anterior crural in the thigh, in the third case branches of the anterior tibial. In all 3 cases the nerve fibers appeared normal. He has found slight changes in the posterior columns of the spinal cord in 2 cases of diabetes. Similar changes have also been recorded by Sandmeyer, Leyden, and Minor. In one of these 2 cases, the knee-jerks were absent, the peripheral nerves examined (branches of the anterior crural) were normal, but changes were found in the posterior columns extending down to the upper lumbar region. In other cases he found the spinal cord normal, and many cases have also been recorded in which the knee-jerks have been absent, and yet the cord has been normal on pathological examination. Nonne has reported a case of diabetes, complicated with progressive muscular atrophy. Pathological examination revealed chronic anterior poliomyelitis. The nerve cells and fibers of the anterior horns of grey matter were markedly degenerated at all parts of the cord; at the latter stage of disease the knee-jerks were absent. In one case in which the knee-jerks were absent during life, he found both the smallest peripheral nerves (branches of anterior crural) and the spinal cord normal on pathological examination, and others have had similar results. The changes which have been found in the cases just mentioned—*i. e.*, changes either in the spinal cord or peripheral nerves—have been sufficient to explain the loss of knee-jerks in these cases. But in other cases, in which both cord and small peripheral nerve present no recognizable changes histologically (and probably these are more numerous than the former), some other explanation is needed. Either changes (not yet described) are present in the most minute nerve fibers and motor end plates or the loss of the knee-jerk is due to some functional change in the spinal cord, peripheral nerves, or muscles. Marinesco has recently recorded a case of diabetes in which both knee-jerks were absent, but after an attack of hemiplegia the knee-jerk returned on the paralysed side, the case being analogous to that of tabes reported by Dr. Hughlings Jackson and Dr. Taylor, in which, after an attack of hemiplegia, the knee-jerk returned on the paralysed side. He formulates the following conclusions: (1) In Manchester, amongst hospital patients suffering from diabetes mellitus, the knee-jerks are lost in from 49 to 50 per cent. of the cases. These patients mostly suffer from a severe form of the disease; 81 per cent. are under the age of 50 years; frequently there is great emaciation, and the cases are often at an advanced stage. (2) In private practice, amongst patients who live under more favorable conditions, and in the milder forms of the disease occurring in gouty or well-nourished people over the age of 50 years, I believe the proportion of cases in which the knee-jerks are absent will be much less (knee-jerks were absent in 16.7 per cent. of private patients —Eichhorst; knee jerks were absent in only 7.6 per cent.—Grube, of Neuenahr, —the patients being mostly over 50 years). (3) The knee-jerks when present at an earlier period are frequently lost or diminished later. During the last few days of life the knee-jerks are lost in 73 per cent. of hospital diabetic patients in Manchester. (4) They were lost in 18 out of 21 cases of diabetic coma (86 per cent.). (5) Amongst diabetic hospital patients the knee-jerks are more frequently lost under the age of 30 years than over 30. (6) Since the course of diabetes mellitus depends on so many circumstances, it is somewhat difficult to estimate the exact prognostic value of one symptom, which is occasionally absent even to the last; but the above facts and considerations seem to show clearly that the loss of knee-jerks is more frequently associated with unfavorable prognostic indications.—*Lancet*, July 17, 1897.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. Hoisholt, M.D., Assistant Physician, State Asylum for Insane,
Stockton, Cal.

Hereditary Mental Degeneration.—Dr. C. Leegaard, of Christina, has published a treatise on the subject of heredity of mental degeneration, in which he reports complete genealogies of 15 families having members suffering from hereditary psychoses. Suicide, alcoholism, and crime were rarely met with in these genealogies; intolerance for alcohol, coffee, and tobacco are, however, frequently encountered. The etiology of degeneration appears especially to be connected with the union of two families with hereditary tendencies; sometimes the effect of these tendencies is noticeable through several immune generations. The extinction of a family is rarely brought about by degeneration; on the contrary, a marked increase is frequently observed—*Norsk Mag. for Laagev.—Centralbl. f. in. Med.*, June 19, 1897.

Cases of Mental Enfeeblement—Recovery.—Dr. F. Beach reports 3 cases, illustrating how much a careful physical, moral, and intellectual education may accomplish in weak-minded or imbecile children. The author speaks of a congenital and an acquired form of feeble-mindedness. Sometimes an occasional cause, such as fright, is active in its development. Among 1,180 cases, the writer found phthisis in 383, or in 32.45 per cent.; psychoses in 210, or 17.79 per cent., and alcoholism in 231, or 19.57 per cent. of the parents to be the predisposing cause of the imbecility. Alcoholism was mostly found in the father, in only 12 cases in the mother, and in 7 cases in both. Of the 1,180 children, 136 suffered from epilepsy, *i. e.*, in 11.52 per cent., in 338 cases there were neurotic tendencies in the family, such as convulsions, etc —*Lancet.*

The Medical Treatment of Epilepsy.—Dr. Frederick Peterson, of New York, notes among recent remedies 1 to 2 or 3 drachms of the tincture of simulo thrice daily as harmless and deserving of trial. Solanum carolinensis in his hands has proved of no value whatever. The opium-bromide treatment of Flechsig is of great value for many patients, especially in old and obstinate cases, when all the other agents have proved ineffectual. Adonis vernalis combined with the bromides is an efficient method of treatment. In cases of autointoxication the regulation of the diet, frequent drinking of hot water, occasional flushing of the large intestines, the use of intestinal antiseptics, are all indicated. Dr. Roche reports 16 cases which showed better results from treatment with bromide of strontium than with other bromides. In some cases the improvement was not marked, in others it was very striking; eight of the cases had been free from fits for periods of 4 to 16 months. The ordinary plan was to give 20 grains of bromide of strontium and 5 to 10 grains of one of the other bromides three times a day. The strontium salt was increased to 1 drachm, when necessary to control the fits, and acne was prevented by the addition of arsenic.—*New York Medical Journal—Journal Nervous and Mental Disease*, June, 1897.

A Case of Somnambulism in Bright's Disease.—DR. R. LÉPINE reports a case in which two years previously peculiar aural and visual disturbances had shown themselves. Noises and tones, even loud ones, were not perceived unless the attention of the patient had been directed to the person or object from which they came; in the same manner he had an imperfect perception of objects to which his attention had not previously been directed. At the same time marked photophobia and blepharospasm were present. Unexpected contact with any object or person caused epileptic attacks. Separation of the spasmodically contracted lids caused dilatation of the pupils. Death finally occurred in uremia. The autopsy showed besides contracted kidneys and hypertrophy of the heart, two apoplectic cysts placed symmetrically in the two hemispheres between claustrum and putamen (the lateral segment of the lenticular body); the cyst on the left side was 2 cm. long, the one on the right was the size of a hazel-nut, and exposed the isle to some extent. It was remarkable that there was a complete absence of all hemiplegic symptoms.—*Centralblatt f. innere Med.*, June 19, 1897.

FORMULÆ.

By H. E. SANDERSON, Ph.B., M.D., Assistant Physician State Asylum for Insane, Stockton, Cal.

Chronic Urticaria.—DR. J. P. SAWYER recommends sodium nitrate, one grain, three times a day.—*Cleveland Journal of Medicine.*

Menthol in Vomiting.—The *Journal des Praticiens* advises the following for obstinate vomiting:

Menthol	2 grains
Hydrochl. of cocain	4 grains
Alcohol	2 ounces
Syrup	1 ounce

Sig.—Small teaspoonful every half hour for several doses.—*Therapeutic Gazette.*

Camphor as an Antigalactogogue. HERRGOTT favors camphor, in 6-grain doses, three times a day, for a few days.—*Semaine Méd.—Medical News.*

Psoriasis:

Ichthyol	ʒ i
Acid salicylic	℈ i
Zinci oxidi	ʒ ii
Amyli	℥ iv
Petrolati	℥ i

Sig.—Apply locally, twice a day.—*American Medico-Surgical Bulletin.*

Sugar for Carbuncles and Furuncles.—According to DR. T. RICHARDSON, sugar accelerates the softening of furuncles and carbuncles, when poured upon flaxseed poultices.—*Prescription.*

Burns:

Acetanilid	1 drachm
Gall ointment	1 ounce

—*Maritime Medical News.*

Tincture of Iodine for Herpes Zoster.—Painting with tincture of iodine has proven very satisfactory for herpes zoster.—*Cleveland Medical Gazette.—Atlantic Medical Weekly.*

Oil of Wintergreen for Herpes Zoster.—CHAMBARD-HÉNON relates a case of herpes zoster cured by oil of wintergreen, used externally.—*Journal de Médicine de Paris.*

Furuncles of Eyelid:

Tinct. camphoræ .....min xv
Sulphur. precip.........gr. xv
Aquæ calcis..............
Aquæ rosæ ....āā ʒ ijss
Pulv. acaciæ ....gr. iii

—*Medical Record.*

Salophen for Pruritis.—A drachm a day of salophen is said to be very efficacious in itching from many causes.—*Medical News.*

PUBLIC HEALTH.

BY W. R. CLUNESS, M.A., M.D., San Francisco, Cal.

Mortality for August, 1897.—The deaths registered in 131 town districts of the State, during the month of August, in a population of 717,450, correspond to an annual rate of 13.20 a thousand, the total mortality having been 804. 44 deaths were due to zymotic diseases, giving an annual rate of .73 a thousand. Of these, 9 were due to diphtheria, 9 to cholera infantum, 10 to typhoid fever, 6 to diarrhea and dysentery, 3 to cerebro-spinal fever, 1 to whooping cough, 4 to croup, 0 to intermittent and remittent fevers, 2 to scarlet fever, 0 to measles, and 0 to small-pox. 172 deaths resulted from diseases of the respiratory organs, giving an annual rate of 2.88 a thousand. Of these, 116 were due to consumption, 36 to pneumonia, 17 to bronchitis, and 3 to pulmonary congestion; the rate being, for consumption and pneumonia, 1.92 and 0.60, respectively. 38 deaths resulted from diseases of the heart, 0 from alcoholism, 2 from erysipelas, 36 from cancer, and 463 from causes not given. The average annual death rate from all causes occurring in the ten largest cities and towns in the State, and representing a population of 618,100 was 13.70. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco, the lowest from Berkeley.

METEOROLOGY.

Summary for August, 1897.—*Temperature.*—The normal temperature of the State for August is 73.7°; the average for August, 1897, was 73.9°, a departure from the normal of +0.2°; the highest monthly mean was 107.4°, at Salton; the lowest 55.9°, at Point Reyes Light. The maximum temperature was 124°, at Salton, on the 12th. The minimum, 18°, at Sneddin's Ranch and Bodie, on the 29th and 30th. The absolute range for the State was 106°. The greatest monthly range was 74°, at Sneddin's Ranch; the least, 16°, at Point Lobos.

Rainfall.—The normal precipitation for the State for August is 0.03 inches; the average for August, 1897, was 0.03 inches, a departure from the normal of 0.00 inches. The greatest monthly precipitation was 1.57 inches, at Little Rock Creek; the least, nothing, at various places.

Wind.—The prevailing direction of wind was S.W.

Unusual Features.—There were no unusual meteorological phenomena.—W. H. HAMMOND, Director State Weather Service.

California—Tabular Statement for August, 1897.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	77.5	104	60	------	------	------	0	T	------	27	3	1	N.W.	Southern Pacific Company.
Berkeley......... "	61.1	75	52	67 7	54.5	13 2	0	00.0	87 0	4	12	15	S.	Obs. University of California.
Colfax............ "	75.9	104	57	------	------	------	0	00.0	00.0	25	5	1	N.E.	Southern Pacific Company.
Coronado........ "	73.2	89	65	------	------	------	0	------	------	28	2	1	N.W.	H. A. Masac.
Eureka........... "	56.0	70	47	61 5	51.5	10 0	3	0.15	90.2	4	17	10	N.W.	Weather Bureau Dept. Agr.
Fresno........... "	81.0	108	54	99.0	64.0	35.0	0	0 00	35 0	27	4	0	N.W.	" " "
Keeler .... "	88.7	108	70	------	------	------	3	0 19	------	12	15	4	S.	" " "
Los Angeles.... "	72.0	96	54	83.0	61.0	22.0	0	0.00	74.0	12	19	0	W.	" " "
Monterey .... "	61 6	73	52	------	------	------	0	0.00	------	1	20	10	S.W.	Southern Pacific Company.
Napa........... . "	66.7	96	48	81.7	51.8	29.9	0	0.00	76 0	12	19	0	S.W.	Station Napa Insane Asylum.
Oakland .... "	59.2	78	51	69.4	53.6	15.8	0	T	89 0	8	21	2	W.	Chabot Observatory.
Paso Robles.... "	80 9	105	53	------	------	------	1	0.06	------	26	5	0	W.	Agr. Experimental Station.
Red Bluff....... "	80.2	109	56	95.5	65.0	30.5	0	T	------	29	1	1	S.E.	Weather Bureau Dept. Agr.
Sacramento*... "	73.4	103	50	89 0	57.8	31.2	1	0.01	------	27	3	1	S.W.	" " "
San Bernardino "	77.4	107	47	------	------	------	0	0.00	------	18	12	1	W.	A. K. Johnson, M. D.
San Diego. ..... "	69.9	89	60	74.4	65.6	8.8	0	T	79.0	28	2	1	N.W.	Weather Bureau Dept. Agr.
San Francisco.. "	57.4	70	49	62 6	52.3	10.3	0	T	90.0	9	20	2	W.	" " "
Santa Barbara.. "	71 9	86	60	75.6	57.6	18.0	0	0.00	74.0	23	8	0	W.	Hugh D. Vail.
Santa Cruz...... "	63.0	89	45	------	------	------	0	T	------	25	3	3	W.	W. R. Springer.
Yuma...........A. T.	94.5	112	80	------	------	------	----	0.16	------	----	----	----	S.	Southern Pacific Company.

Blank (----) indicates data missing.

*Humidity at Sacramento at 5 P. M.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: OCTOBER, 1897

THE LANE MEDICAL LECTURES.

The second annual Course of the Lane Medical Lectures was delivered at Cooper Medical College, September 20th to 24th, 1897. As already announced, the lecturer on this occasion was MR. CHRISTOPHER HEATH, Holme Professor of Clinical Surgery in University College, London. The Course consisted of ten lectures, that being the number originally designed. The lectures were delivered at 11 A. M. and at 8 P. M., which, as we have already pointed out, are much more convenient hours than those assigned last year. This division of the day enables visiting members of the profession to have quite a little time at their disposal for business or pleasure, while resident members of the profession will also be enabled to attend the Course with a minimum of inconvenience.

The range of subjects selected by the distinguished lecturer covered a very wide field; in fact, it may be fairly said that it was impossible, in the brief time afforded by one or two lectures, to do even partial justice to the chosen theme. It must be conceded that, from an educational standpoint, better results will be obtained from the system adopted by PROFESSOR MACEWEN last year, under which a number of lectures were devoted to a single subject. The lectures delivered were as follows: Two on Congenital Malformations, two on Diseases of the Rectum, two on Diseases of the Jaws, and one each on the Tongue, the Joints and on Aneurism, and one entitled "A Century of Surgery."

The concluding lecture of the course, "A Century of Surgery," which appears elsewhere in this issue, showed the lecturer at his best. Strictly speaking, this lecture should be entitled "A Century of English Surgery," as it deals largely with surgical progress in that country, touching only on the advancement elsewhere incidentally, or when giving credit to distinguished members of the profession for specific methods. This criticism is not made in any captious sense, but as emphasizing the general character of the course as a whole. The lectures were delivered by one of the most eminent members of the surgical profession in England and one who has often been honored by his countrymen in the profession. It was, therefore, characteristic that, as a whole, the lectures should be typical of English surgery. Their prominent characteristics might be expressed as a wholesome regard for human life, a steadfast consideration of the welfare and comfort of the patient, and a stout conservatism which councils operation only when it is certain that it will be of real benefit to the patient. We have said that the lectures were characteristically English, and, unless this be kept in mind, the average American physician, with his cosmopolitan temperament, will fail to understand why so little attention was paid to surgical literature or surgical science outside of the United Kingdom. It was, no doubt, surprising to a cosmopolitan audience to hear so little reference to German, French or Italian surgeons, of whom we in this country hear and know so much. It is very noticeable that the principles inculcated by MR. HEATH, as well as the most of his illustrations, were founded upon the result of work and experience amongst English practitioners, and largely London men.

Viewed as a whole, the lectures were eminently practical in character. They dealt but little with pathology, but contained a large amount of material in the shape of hints and suggestions in diagnosis and treatment, which will be best appreciated by those whose experience has been sufficient to enable them to properly estimate their worth. They were really clinical lectures, such as MR. HEATH is constantly in the habit of delivering, illustrated by descriptions of typical cases and photographs or other representations of unusual cases, all drawn from a vast experience.

The Course for next year has been practically decided upon. The lecturer on that occasion will be DR. THOMAS CLIFFORD ALLBUTT, of Cambridge, England, and the subject, as at present indicated, will be Diseases of the Heart, the entire course being devoted to their consideration. This arrangement, if carried out, will, we believe, be more satisfactory than any that has hitherto obtained. It will give a greater completeness to the course, and, from the standpoint of instruction rather than of experience, will be more largely beneficial to the students of Cooper Medical College, for whose benefit the lectures are primarily intended.

NOTES.

San Joaquin Valley Medical Society.

The second semi-annual meeting of the San Joaquin Valley Medical Society will be held in Masonic Hall, Bakersfield, Cal., on Tuesday, October 12th. The Society will convene at 8:30 A. M., and will hold an afternoon and evening session. After the evening session a banquet will be tendered the visitors by the Kern County Medical Society. The following are the papers with the names of their authors, as well as the names of those who will open the discussions on the various subjects: "Hysteria," J. H. Fulkerson, Bakersfield; W. H. Miller, Hanford. "Gastro-Intestinal Antisepsis," A. J. Pedlar, Fresno; C. A. Rodgers, Bakersfield. "The Relation of the Profession to the Sick Poor," C. H. Rowell, Fresno; D. H. Trowbridge, Fowler. "Electricity in some Forms of Genito-Urinary Disease," N. P. Duncan, Hanford; M. D. L. Allen, Delano. "Abscess of the Brain," J. B. Rosson, Tulare; T. E. Taggart, Bakersfield. "Purpura Hemorrhagica," W. J. Baker, Fresno; F. R. Brown, Madera. "Some Observations on Recent Methods of Treatment of Typhoid Fever," R. E. Dixon, Hanford; G. A. Hare, Fresno. "Placenta Previa," J. S. Eishelman, Fresno; W. T. Maupin, Fresno. "Chronic Hydrocephalus," presentation of a case by W. H. Cook and J. L. Carson, of Bakersfield.

SPECIAL ARTICLES.

THE LANE MEDICAL LECTURES.

The second Course of the "Lane Medical Lectures" commenced at Cooper Medical College on Monday, September 20th, the lecturer being MR. CHRISTOPHER HEATH, of University College, London. The Course was, on this occasion, complete, arrangements having been made for ten lectures which were delivered as follows: Monday, September 20th, two lectures on "Congenital Malformations;" Tuesday, September 21st, two lectures on "Diseases of Rectum;" Wednesday, September 22d, two lectures on "Diseases of the Jaws;" Thursday, September 23d, one lecture on the "Tongue" and one on the "Jaws;" Friday, September 24th, a lecture on "Aneurism," and in the evening, the concluding lecture which was entitled "A Century of Surgery." The lectures were delivered in the large auditorium attached to the College. The attendance was fully equal to that of last year, and the publicity that had been given to the Course resulted in the presence of a number of medical men from all parts of the State.

The Course opened promptly at 11 A.M, on Monday, September 20th; in fact, promptness was one of the lecturer's characteristics, and he was never behind time on any occasion. In introducing the lecturer, DR. L. C. LANE, the President of the College, spoke as follows:

Students of Cooper Medical College and Members of the Medical Profession: To-day witnesses the opening of the second course of the Lane Medical Lectures. I congratulate you and myself on having been so fortunate as to secure for the delivery of these lectures one who is so well qualified to do justice to the work, MR. CHRISTOPHER HEATH, Past President of the Royal College of Surgeons, England. To preside over that learned body is a great honor; in fact, one most coveted by the surgical profession of Great Britain. But MR. HEATH bears with himself other honors; he has enriched surgical literature with many valuable contributions. For many years, also, he has occupied the Chair of Surgery in University College, London, in which he is held in reverence by the class of students who attend that institution. MR. HEATH is also one of the leading operators in London. Thus triply qualified as writer, teacher and operator he comes to you. And with this brief introduction of our eminent guest, with much pleasure I introduce to you PROFESSOR HEATH, who will now open this course by a lecture on Congenital Malformations.

After a few words of introduction, in which he spoke of the munificence of DR. LANE in founding this course of lectures, and of the course delivered by PROFESSOR MACEWEN, of Glasgow, the previous year, MR. HEATH proceeded to his initial lecture on "Congenital Malformations." This lecture dealt chiefly with the following deformities: Meningocele, encephalocele, and spina bifida, conditions, in which he chiefly advised non-interference. These anomalies were mainly interesting from the standpoint of diagnosis. Dermoid cysts, hairy moles, fetal inclusion and fetal fusion were also briefly described. Hair-lip was more fully discussed. Here, MR. HEATH prefers to operate after the third week and not later than the third month. In severe double cleft, in which the premaxillary bone projects from the tip of the nose, he advises removal of the bone rather than replacement. Apropos of the etiology of hare-lip, he told an interesting anecdote of the persistent occurrence of this deformity in lions' cubs, born in confinement. In the Zoological Gardens the lions are fed but once a day; it was found that when the pregnant lioness was fed more abundantly and oftener, that she gave birth to cubs with properly developed upper lips. In the second lecture MR. HEATH described the various defects occurring about the genitalia, ectopia vesicæ, epispadias, hypospadias, hermaphrodism, and retained testicle.

In the two lectures on the "Rectum," the various surgical affections of that portion of the intestine were discussed in detail. In many cases of imperforate anus, he advised inguinal colostomy in preference to an extensive dissection to find the lower end of the gut. In hemorrhoids, he prefers the ligature to the clamp or cautery. For fissure, he prefers cutting and dilating, an operation he is accustomed to do without an anesthetic. In prolapse of the rectum, he prefers making a number of deep vertical streaks with the Paquelin cautery. In the treatment of carcinoma of the rectum, MR. HEATH advises making an inguinal colotomy in most cases, whether or not operative removal of the tumor was to be attempted; and he described at some length the Kraske method for the removal of malignant rectal growths.

The two lectures on "Diseases of the Jaws" were, perhaps, more minute than any of the others. They treated chiefly of the various tumors found in that locality—odontoma, dentigerous cysts, osteoma, epulis, sarcoma, epithelioma. As a means of diagnosis, he advises the use of the trocar, in doubtful cases, especially in tumors appearing at an early age. In epulis and other tumors starting from the alveolus, he also laid great stress on counting the teeth, in order to determine whether the neoplasm had any relation to an unerrupted tooth. He referred to suppuration of the antrum of Highmore as being more common than was generally supposed. In treating this affection, he preferred to puncture with the trocar through the alveolus, if a tooth has been lost, or through the canine fossa, if one had not been extracted. This was followed by frequent irrigation of the pus cavity. The lecturer then described the various typical operations done on the jaws. He prefers resection of the superior maxilla, without previous ligation and resection of parts of the lower jaw, by preference to excision of the whole.

In treating of the "Tongue" the lecturer dealt first with its affections mainly from a clinical standpoint, particular attention being paid to differential diagnosis. He advocated the early removal of the organ in undoubted malignant disease and in the absence of glandular enlargement. The various methods of removal were dealt with, those involving an extra-oral opening being referred to. The question also of previous ligature of the lingual artery was mentioned, but this the lecturer deemed quite unnecessary. The ecraseur and the galvanic knife were also referred to, but the author's preference seemed to rest with the scissors and scalpel. He alluded to the greater ease in performing this operation which was conferred by splitting or rather tearing the tongue down through the center, a maneuver which was not difficult of accomplishment. In the subsequent treatment of these cases, as indeed also when dealing with operations upon the jaw, Mr. Heath paid a glowing tribute to the value of iodoform, which he regarded as absolutely indispensable in these cases. He said that prior to its introduction the fetor from operations about the mouth and nose was abominable, a fact that was entirely within the recollection of many of his audience. Now, by the use of iodoform, not only was this fetor entirely absent, but the operative wounds heal with greater facility, and the patient was not only immensely more comfortable but he was also enabled to take food freely, thus greatly hastening his recovery. From the liberal manner in which the distinguished lecturer was in the habit of using this antiseptic it would appear that the toxic symptoms of the drug rarely developed in his practice.

In his lecture on "Joints," Mr. Heath opened with the statement that it was not easy to draw the line between those cases which belonged to the physician and those which belonged to the surgeon. For instance, synovitis was common enough in the physician's practice as a result of rheumatic fever. In the surgeon's it was usually due to trauma. In punctured wounds of the joints he called attention to the necessity of avoiding error due to confounding synovial fluid with that escaping from a bursa. In the treatment of synovitis the lecturer said he had the greatest faith in cold. This should be applied in the form of an ice bag for not less than twenty-four hours. If this period had passed and if the accumulation of fluid was considerable, he advised aspiration. The speaker, in passing, alluded to his faith in what the old physicians called the *primæ viæ*, a belief which he feared was not shared by those of the present generation. Gonorrheal synovitis he regarded as strictly surgical, and gonorrheal rheumatism as a form of pyemia. In this affection he found quinine of great value. The presence of pus in any joint was a very serious condition, and its early evacuation was most important. Speaking of chronic diseases of the joints, he said that in London, owing to overcrowding and underfeeding, a large amount of tuberculosis was encountered amongst children. In this disease the results of change of air, especially to the seaside, coupled with good food, were very marked. If this be not possible, then fixation of the joint and the best food and air that the hospital afforded were the next best substitutes. Unfortunately the disease did not always remain stationary, and in that case further operative proceedings were indicated. Formerly, in preanesthetic days, amputation was the only resort, but now resection, primarily introduced by SYME, LISTON and FERGUSON, was the accepted procedure. He found the use of the actual cautery, two or three lines drawn along the side of the joint, to be very effectual in stopping the startings of the limb at night in these cases. The speaker then mentioned the remote affections of chronic joint inflammation as deposit in other organs and lardaceous inflammation. Syphilitic disease of the joints was also mentioned, and a few moments of much interest were consumed in dealing with gouty and rheumatoid arthritis, which the speaker said was a very common affection in the old country. Loose cartilages, first described by JOHN HUNTER, were also alluded to, and the lecturer closed with a feeling allusion to the bone-setter and his work.

In his lecture on "Aneurism," MR. HEATH, after defining the various varieties, and entering into the pathology of the disease, took up next the subject of diagnosis. In aneurism, many mistakes had been made even by eminent men. Operations have been performed for cases supposed to be aneurism and for others supposed to be something else. The cure of aneurism was obtained by the occlusion of the tumor by a firm blood clot. From very early days attempts had been made to cure aneurism by general treatment, and the lecturer believed that rest was certainly a very important element in the management of these cases. The TUFFNELL or "Dublin method" of treatment was mentioned as a further and more scientific modification of the rest cure. The lecturer then reviewed, from a historical standpoint, the treatment of aneurism by ligature. In this he felt that HUNTER deserved all the credit that had ever been bestowed upon him for this operation. The lecturer mentioned that having, during the present year, been selected to deliver the Hunterian oration at the College of Surgeons, he had looked up the matter quite freely and he was perfectly satisfied that HUNTER'S claims were well founded. As an extension of the Hunterian operation, distal ligation and the further modification of double ligature in some cases, as aneurism of the innominate, was mentioned. The speaker alluded to one of his own cases operated upon in 1865, and for many years believed to have been an innominate aneurism. Subsequent discussion, however, showed that this view was erroneous, and that the trouble really involved the aorta. The original record of this case and its subsequent description in the text-books had, he believed, rather led to its being overlooked. In explaining the improvement in an aneurism due to distal ligature, the lecturer offered a tentative hypothesis. This was, that, by the retardation of the effluent blood current, the blood no longer went directly through the sac, but that, in fact, an eddy was created, which tended towards the deposition of fibrin. The lecturer then returned again to the subject of pressure treatment and next proceeded to the discussion of the ligature material. This, he said, had in earlier years been hemp or silk, the introduction of absorbable material which had been tried by COOPER having been given up owing to the putrescence which always followed. LISTER, however, showed that it was possible to use catgut, and the speaker said that he had often used it with advantage, though sometimes with failure. Other materials had been brought forward and various methods of tying had been suggested, but he believed that the early teaching of JONES, which consisted in tying the artery as tightly as possible, in order to divide the middle coat, was the safest practice. The lecturer, in conclusion, alluded very briefly to a recent communication of MURPHY, of Chicago, in which that surgeon had demonstrated the possibility of excising a portion of an artery and reuniting the severed ends, thus preserving the patency and function of the vessel.

The concluding lecture of the Course, "A Century of Surgery" [published at page 549], will not permit of a brief abstraction. It will be thoroughly enjoyed by all interested in the progress of surgery which, while of late years enormous, has, by no means, been standing still during the past century. The great impetus of the discovery of anesthesia had hardly subsided when a renewed stimulus was conferred by the establishment of antiseptic wound treatment. Since these two boons have been accorded to suffering humanity, enormous progress has been made, and while at any time one may theorize that only improvements in *technique* would now be possible, it is evident from the month to month record that further and greater surgical triumphs are still to be attained.

At the conclusion of the final lecture, DR. L. C. LANE said: Ladies and Gentlemen: MR. WM. A. BROOKE, one of the members of the Senior Class of Cooper Medical College, stands here before you to deliver a short address to Mr. Heath in regard to the course of lectures which we have had the honor of listening to.

MR. BROOKE then spoke as follows: PROFESSOR HEATH, allow me, in behalf of the students of Cooper Medical College, to extend to you our hearty appreciation of your services during your brief stay with us. While few of us will ever be able to study in the great centers of learning of the old world, we deem it an inestimable pleasure to thus be enabled to listen to the modern masters of surgery and medicine. I assure you these lectures will be an incentive to us to strive more diligently in the pursuit of our vocation, and will awaken renewed zeal to obtain that knowledge which is only acquired by careful and diligent study.

This course of Lane Medical Lectures will not be a benefit only to the students of Cooper Medical College, but will also doubtless prove of profit and interest to the medical profession of the Pacific coast. The names of those whom the laity call the great men of art and oratory are often referred to as men of wonderful genius, but the learned know full well that for true merit they are not to be compared to the skilful surgeon who, with confidence in his knowledge and with a firm hand and steady nerve grasps his knife and relieves frail man of his bodily ailments and starts him once more along the pathway of life. ELIAS S. COOPER, in whose memory this institution was founded, was firm in the belief that the greatest calling a man could have was to be an eminent surgeon. A common remark of his was, "I would prefer to be SIR ASTLEY COOPER rather than to be ALEXANDER HUMBOLDT, or any other non-medical celebrity of old." We congratulate you, sir, on the success you have attained in your profession, and hope you may live long to teach men this most important of all the arts.

We feel a debt of unbounded gratitude to the President and founder of Cooper Medical College, PROFESSOR LEVI COOPER LANE, who, by his untiring efforts in our behalf, has thus made it possible for us to reap the rewards which naturally come from such a course of lectures. He has given much of his talent and fortune in order that we may be the better equipped to pursue our studies in a careful and scientific manner. This great edifice will ever stand as a monument to his greatness and generosity, and PROF. LANE will always command the respect and love of the students of Cooper Medical College. In concluding, MR. BROOKE said that PROF. HEATH'S name would soon be chiseled on the marble slab among the notable celebrities who, from year to year, will stand upon this platform and expound the imperishable truths of medicine and surgery.

DR. LANE then said: It is proper that I should say a few words to-night at the conclusion of this course of lectures. MR. HEATH, I desire to express my thanks, and also those of the corporation of Cooper College, for these lectures. Surgery, as we know, is a union of science and art; science, by that I mean knowledge; by art, knowledge applied or put into action. The course of lectures which you have delivered has most eminently filled and represented these two elements of our great profession. Your lectures have been replete with practical instruction, in which the students have been taught in boldness, not to be rash. If any lesson has been taught to you, students of Cooper College, and you members of the medical profession, this has been the leading characteristic of the lectures which we have here heard: the honest expression of an honest heart, who looked first to the safety of his patient rather than his own reputation. The story which MR. HEATH told here to-day of an operation for aneurism, illustrates this. He confessed that though for a long time he thought it was an aneurism of the innominate artery, it proved to be one of the aorta. He modestly confessed the error of diagnosis which he had made—a lesson to you to be truthful; ever truthful. You have been taught by him, as I say, in boldness not to be rash, and in conservatism not to be inactive.

In the days of ancient Rome, a citizen who had saved a life was honored with what was called the civic crown. Such a civic crown, I am sure, will be, time and again, given to many of you students if you will follow the teachings of the great master, who to-night concludes his course. MR. HEATH, the work you have done here receives my fullest approval. The salutations of fame have long since reached and filled your ears in the old world. The new world now tenders to you its honest tribute, and we beg to add one more chaplet, one more wreath, to the many which already adorn your brow.

I will now announce that I have been in negotiation, and the matter, I may say, is practically completed, so that next year the Lane Course will be delivered by one of the most eminent men of England, long famous in his profession, long honored as a professor in one of the greatest institutions of the English speaking world. This is DR. THOMAS CLIFFORD ALLBUTT, Regius Professor of Physic, in the University of Cambridge. The subject of his lectures will be "Diseases of the Heart."

MR. HEATH: I must trespass upon your attention for just a few moments, in order that I may tender my thanks to MR. BROOKE, and to those whom he represents and whom I see before me, for the extremely kind speech which he made in connection with the lectures which I have delivered here. I need hardly say that it is a great honor for an English surgeon to come to the west coast of America to deliver a course of lectures. Not only is it an honor, but in my case it has been a great pleasure, because I have had the satisfaction of meeting men whose names I have known for years, and I have received from them such kindness that I shall go back to England thinking how I can ever repay the kindness which I have received here.

It is the first occasion on which I have ever addressed a mixed class of students. In England we do not have them. I mean that there are medical schools for male students, and there are also schools for ladies. I was a little nervous, I must say, about the reception I might receive from the lady students of this college. I can only say I have to thank them as well as the male students, with whom I am more familiar, for the very kind and most attentive way in which they have listened to me. I trust that what I have said may be of some service to them. All I can say is that I have honestly endeavored to place before them the experience I have gained as a teacher for a good many years, and that I think that I have never made any statement which I am not prepared to verify. I have had the pleasure of signing a large number of cards certifying that the male and female students have attended this course, and I am very pleased that my signature, if it is worth anything, should be in the possession of every member who has attended. I could wish that in the case of the ladies I could add something more than a signature.

With regard to what Dr. Lane has so kindly said, I feel that really I do not deserve a quarter of the encomium which he has heaped upon me. I am only too glad to have in any way met the views which he had in so liberally founding the Lane Course of Medical Lectures. I had to follow a very eminent surgeon, and I shall be followed by an equally eminent physician. I trust that when the glamour of these few days has passed off, you will still think that there is something in what I have said, and that it may prove useful to you. All I can say is that I wish you all much success in your honorable profession.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, August 31, 1897.

The President, W. J. Hanna, M.D., in the Chair.

Dr. W. E. Briggs read a paper entitled "The Upper Air Tract in Health and Disease, and its Influence on the General Health." [Published at page 568.]

Dr. A. M. Henderson: Although the author apologized for his paper, I think he has covered the subject very carefully, so much so that the paper practically precludes discussion. I notice daily children with symptoms of adenoid vegetations, and I believe the physician in general practice is too likely to neglect this condition. The preventive aspect of the paper is very important, and too many of us pay little attention to advising our patients as to the care of the nasal cavity. Diphtheria is likely to be especially severe in patients afflicted with enlarged tonsils or adenoid growths.

Dr. W. A. Briggs: Specialism in medicine is of undoubted advantage in several ways. It has given remarkable impetus to the various special branches (ophthalmology, surgery, gynecology, for instance), and thus has advanced both the science and the art of medicine and surgery. But in some ways it has just as certainly reacted unfavorably on the great body of medical men. By surrendering whole organs and functions to the specialist the general practician begins to regard them as something separate and apart from his own work. He investigates their diseases less thoroughly and imagines that, in turning over to the rhinologist, all severe cases of nasal disease he has done his full duty as far as the nasal tract is concerned. While by no means inclining to narrow the field of the specialist, I would have the general practician enlarge his own. In diphtheria, in scarlatina, in measles, in whooping cough, in syphilis, in colds, in a large number of diseases which come almost exclusively under his care, the general practician gives too little attention to the nose and throat. Even in diphtheria it has been too much the fashion, happily less so now, to rely altogether on antitoxine to the exclusion of local measures which, particularly in the early stages of this disease, we had all found so efficient. The local as well as the systemic disturbance will be less severe, and extension to contiguous tissues and to neighboring organs less frequent if the nose and throat, and even the larynx, be kept as far as possible in an aseptic condition. In scarlatina likewise we are remiss. As I said, the general practician should enlarge the sphere of his knowledge and activity, not by encroaching on that of the specialist, but by the diligent cultivation of his own. The paper of the evening is a special one with general application; it will help us in the direction I have indicated.

Dr. T. W. Huntington said: He had rarely undertaken the surgery of the nasal cavities, but he had been in the habit of excising tonsils frequently. He alluded to the danger of alarming hemorrhage after this operation, and referred to a case in which a patient operated upon at his office was allowed to walk to his residence unattended. A few hours later the patient was found almost exsanguinated and in a most alarming condition. Cases in which such hemorrhage occurs are usually due not to the severing of a large arterial trunk, but to capillary oozing.

Dr. L. A. Harcourt: Preventive medicine will be the medicine of the future, and the very near future. In fact, to some extent, it is the practice of to-day. Healthy tissues have the power to destroy a certain number of bacilli, to prevent or lessen their proliferation, and to inhibit their action. So also have the nasal and most other secretions. Anything that lowers the vitality of the tissues lessens their power of resistance, and makes them more susceptible to the destructive influence of bacteria. More than that, diseased tissue and altered secretion forms culture soil for the growth of bacilli, the extension of infection, and the development of diseases to which such infection gives rise. Therefore, as the writer states, it is important to keep the nasal and buccal cavities in a healthy condition especially when children are exposed to the infection of diphtheria, scarlet fever, or other contagious diseases. Where this is done the normal secretion will furnish no soil for the multiplication of infectious germs, and the leucocytes will set up and destroy the few that may find lodgment in those cavities. In this way disease may be prevented and precious lives saved.

Dr. H S. McGovern, of Sacramento: In hypertrophy of the so-called lingual tonsils, their removal, particularly in singers or public speakers, is a good operation, as the voice is often very much clearer, the tendency to "hack" and clear the throat is usually obviated, and the movements of the epiglottis are not restricted. In removing tonsils, I think the mistake usually is made of removing too little instead of too much. There is sometimes danger from hemorrhage in this operation, but the amount of tissue removed has very little to do with that, and if the operation is done thoroughly there is less liability to have the work to do again than if only a part of the tonsil is removed.

Dr. Wm. Ellery Briggs said: In a few instances what Dr. G. L. Simmons said of the injurious effects of too great care of children is true, but I believe that most of the cases of nasal, throat, and ear diseases are the result of conditions which could easily be averted by the exercise of rational protection of children's feet and bodies from damp and from the chilling effect of sudden temperature changes. Children should live out of doors; the more the better, if their feet and bodies are kept dry. I must dissent from the views expressed by two of the speakers, viz.: that a part of the tonsil should be removed, trusting what remains will atrophy. In my opinion this is a very harmful practice. It causes no more reaction to remove all of the excess of tonsil than it does to remove a slice of the gland. If the tonsil is thoroughly removed, it will be extremely rare that a second operation will be necessary, but when only a piece has been excised a second operation will be required quite frequently. Most people object to having the tonsils removed, because they have been told so often they will grow again. This popular error has been fostered by the mistaken practice of taking off a slice of the tonsil. In a considerable number of such imperfect operations a second operation will be necessary, and discredit is thus thrown upon a very useful procedure. It is undoubtedly true, as has been suggested, that nasal operations have been resorted to by dishonest men to rob and humbug people. On the other hand, there are few departments of medicine in which the intelligent, skilled, and honest physician can accomplish more than by rational and honest treatment of the upper air tract.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Special Meeting, August 9, 1897.

The President, F. B. CARPENTER, M.D., in the Chair.

A special meeting of the San Francisco County Medical Society was held on Monday evening, August 9, 1897, at 32 O'Farrell street, the President, Dr. F. B. Carpenter in the chair.

This meeting had been called as a special meeting, but a motion having been made and carried that it be considered as the regular meeting of the Society for the month of August, it was so ordered.

New Members.—P. COLLISCHOWN, M.D., G. E. CAGLIERI, M.D., FRANZ KUCKEIN, M.D., G W. RACHEL, M.D., and CLARENCE QUINAN, M.D., were duly elected members of the Society.

DR. DUDLEY TAIT and DR. ALBERT ABRAMS read a paper on "Pneumonotomy."

DR. P. M. JONES said: Eight or twelve months ago I thought a diagnosis might be made in these cases with the X-ray, and experiments have so shown. Lately, in examining a case for necrosis of the vertebræ, the skiagraph showed opacity over the base of the right lung, and many smaller opacities over the same lung. The case finally went to an autopsy, and the right lung was then found to be a mass of miliary abscesses. The time has passed when we can scoff at the X-ray as a means of diagnosis.

DR. J. ROSENSTIRN said his experience was limited to two cases; one a case of gangrene of the lung that occurred seven years ago, the other occurred four years ago, and was a tubercular case. The first patient was a strong, robust man, in Alameda, who had had irregular fever three or four weeks, with pain, dulness, and little respiratory murmur over the lower and posterior portion of the left thorax. He expectorated foul smelling, purulent matter. There was no tubercle bacilli present. The speaker finally resected the seventh and eighth ribs posteriorly, and using the thermo-cautery, entered a cavity about the size of a goose egg. This was drained with iodoform gauze. The pleura was adherent to both walls of the thorax, so no tamponing was done. About four years ago there was quite a stir in Berlin about the opening of isolated tubercular abscesses. About this time Case 2 came along. Positive evidence seemed to show a cavity. He resected the third rib, and used the thermo-cautery, aspirator, and iodoform gauze drainage. The opening healed in two months, and after six months the patient died. The autopsy showed a miliary process in the right lung in spite of the absence of symptoms. The abscess cavity had diminished in size about one-half.

DR. ABRAMS: I consider the X-ray an invaluable method of diagnosis in heart and lung troubles, and it should succeed all others. I have made extensive experiments with it, and know whereof I speak. During the past two months it has discovered for me 4 cases of unsuspected aneurism, and I am sure it will show tubercular disease of the lungs before any physical signs are present.

DR. G. W. DAVIS asked Dr. Tait what amount of pus came from this case, and also if fluid could be detected by the X-ray, as in some cases aspiration fails to show any fluid.

DR. TAIT said there was 2½ ounces of thick pus.

DR. P. M. JONES said we can readily detect fluid in the lung or thorax, and if the abscess is in the lung tissue and ½ oz. in size, there can be no question about it.

DR. C. G. KUHLMAN said he believed the differences in densities and the similarities of them would not give the X-ray such a certainty in diagnosis as was claimed. It is certainly not unscientific to diagnose tuberculosis of the lung without the X-ray.

DR. TAIT said: The cases of Dr. Rosenstirn are clinically and historically interesting. Thirteen years ago Dr. Richter did the operation. The general opinion now is not to operate upon tubercular abscesses of the lung.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, August 7, 1897.

D. W. MONTGOMERY, M.D., in the Chair.

Pneumonotomy for Pulmonary Abscess.—DR. DUDLEY TAIT reported the following case: Y——, boy, 7 years of age, as a sequel of croupous pneumonia presented symptoms of a suppurative process involving the lower part of the left lung. No cough; no expectoration. Exploratory puncture confirmed the diagnosis. Pneumonotomy was performed with resection of the seventh and eighth ribs, and a liberal opening of the pleura. Manual exploration showed marked hepatization and absence of adhesions in the field of exploration. The pleural cavity was temporarily shut off with gauze, and the lung incised with the Paquelin cautery to a depth of 3 cm.; 75 ccm. of thick, non-fetid pus escaped. The walls of the pulmonary cavity were sphacelated, but not thickened. Drainage with gauze. Immediate improvement ensued; two months later nothing abnormal in or over either lung could be elicited by physical examination; radioscopy then showed only slight opacity at the lower border of the left lung, at which point mobility was absent. The paper concluded with a series of remarks on the clinical features of the case, and reviewed the various procedures suggested in pulmonary surgery during the last few years.

DR. J. H. BARBAT: In the little that I have seen so far in X-ray work with regard to mapping out consolidated areas in the lung, it is certainly very effective, and in a case which I have had the opportunity of making an autopsy after the X-ray had been used on the patient, we found that we could map out very clearly small areas. In this case, which was one of hemostatic abscess, we did not know that the boy had abscesses in his lungs when he was alive; we had no way of making them out; they were very small abscesses, containing about a drachm, each with a few larger ones at the base of the right lung. There were also abscesses in the spleen and in the liver. We took a few X-ray photographs, and afterwards we could easily understand why we found little areas that were apparently consolidated. Very small areas would show slight lighter-colored spots; the lung tissue itself allowing the rays to pass through very clearly; these spots holding back the light of the X-ray. We saw some very light spots on the negative, these could not be brought out on the print, we had to take the negative itself. It proved clearly that if we had comprehended the plate at the time, we would have understood that these little areas were foci of infection. In two other cases we were able to map out areas which were unquestionably consolidation. Dr. Jones has proven to his own satisfaction, anyhow, in a number of cases, consolidated areas in the apices of the lungs, and in some cases where physical examination revealed nothing, but in which the tubercle bacilli were found in the sputum. In making the examination we could see the lighter-colored spots indicating clearly the consolidated areas, and they were very small ones. With regard to opening the abscess cavity in the lung, I certainly must concede that that is the only proper way of getting rid of the pus in any large abscess. It should not be any more dangerous than evacuating abscesses in a number of other parts of the body. If properly done, as the author suggests, I cannot see that it is any more dangerous than to evacuate an abscess in the brain; in fact, it is not as dangerous. We trespass on the pleural cavity without thinking twice; there is no reason why we should not go inside of the lung tissue when the occasion demands.

DR. E. E. KELLY: I have never seen a case in which the lung tissue was operated upon except through aspiration. I remember Dr. Hirschfelder successfully evacuated quite a large abscess at one time in the City and County Hospital when I was a student, but I never have seen a cutting operation for that purpose. It certainly would be considered bold surgery, but I have no doubt it will be done As far as opening the pleural cavity is concerned, as Dr. Barbat says, we do that frequently. I had the misfortnue to do it myself in operating upon a sarcoma in the root of the neck; although the man died of pneumonia on the other side about six weeks later. I was very much gratified to know that he did not get pneumonia or pleurisy on the side on which the pleural cavity was opened. There were no symptoms whatever of pleurisy, and no discomfort, although there was no doubt that the pleura was opened, because I could hear the air passing in and out with the respirations during the operation. The case that Dr. Tait has reported is certainly a very interesting one.

DR. W. WATT KERR: In looking at this subject from a medical point of view, the question always is whether we should turn a case of abscess of the lung over to the surgeon at once. From my experience during the past four or five years, I think it is better to do so. There was a time when, as Dr. Kelly mentions, the physician aspirated abscesses just in the way he aspirates a pleuritic effusion; the pleuritic effusion forming a sort of debatable or common ground between the surgeon and physician. But the cases that I have seen where abscesses of the lung have formed, have led me to the conclusion that it is much better to turn the case over to the surgeon, and have the ribs resected. Thinking over cases within the last few moments, I can remember four of abscess of the lung, one of which I saw with the President, where the abscess opened spontaneously. The case was that of a young man; we decided that there was an empyema, and that from other conditions there was also an abscess of the lung. There was no question about the diagnosis, because if I remember rightly, though we did not resect the rib, we opened well into the intercostal space, and when the President used to wash out the pleural cavity with peroxide of hydrogen, the peroxide of hydrogen would show at the patient's mouth, so there was no question of the opening into the lung. The case did remarkably well, but it was a very tedious one; the patient ultimately recovered, and he is well and hearty to-day. Another case that I saw was interesting as showing the mistake quite clearly of simply aspirating. The patient had dulness on percussion, and all the appearance of an empyema, but the curve of dulness did not correspond. He had hectic fever, and we decided to introduce a small aspirator into the pleural cavity; in fact, it was a hypodermic needle, because we were not prepared for anything of the kind, as it was the first time we had seen the patient. We found pus enough, after the needle had been deeply introduced, to fill the hypodermic syringe. Returning later in the day the hypodermic needle was introduced at the same place, and no pus could be found. The largest needle of the aspirator was then introduced at different levels, and still no pus could be found. We had tapped a very small abscess, one of those to which Dr. Barbat referred as being shown by the cathode ray. Going still further backward, I took the aspirator needle and pushed it well in; I felt it enter the pleural cavity, and then go through a substance that gave the sensation of putty, and at once the aspirator was filled with pus. Tubes were introduced there and the cavity washed out, but it resulted in a resection later on and a long sickness. I think it would have been a great deal better if at the very first we had turned the case over to a surgeon, and had him resect the ribs, as he could then see what he was about. I know it took a month for that man to get better. Two other cases of abscess of the lung that came under my observation, I at once turned over to a surgeon, and he operated, and the patients have both made good and rapid recoveries. I really think that when we find an abscess of the lung, the case is one that calls for surgical interference, and should not be left upon the common ground of simple pleuritic effusion. We should regard it as empyema, and as indicating resection of the rib at the site of the abscess. All those four cases have got well. There is far less danger in the operation than there is in the hectic fever from absorption of pus if the operation be not performed.

THE PRESIDENT: The case that Dr. Kerr mentions was a very interesting one. If I remember correctly, the man was taken down with what was supposed to be *la grippe*. He had never had any trouble with his lungs previous to that. He developed an immense empyema; the chest was opened and a large amount of pus was evacuated, and the cavity was washed out regularly with peroxide of hydrogen (Marchand's); we found, as Dr. Kerr says, that the peroxide came up into his throat when we irrigated. At first we did not know what it was, but gradually came to a realization of what had happened. A very curious thing occurred in this case with reference to the very rapid development of club-shaped fingers. In a very short time (two or three weeks), the tips of the fingers became pronouncedly clubbed, with the nails very much bent over. The patient was suffering from bronchitis, following the discharge of the abscess up the trachea. I saw him two or three nights ago, and the fingers are returning to the normal and more rapidly of late. It is now between three and a half and four years. He is troubled with bronchitis once in a while, but very slightly.

Dr. Tait: I should like to take exception to a remark made by Dr. Barbat, that interference with the pleura and lung was less dangerous than with the brain. I do not admit that, for we must not forget the vicinity of the heart, the extent of the serous membrane, and also the physiological role of the lung, the probability of pneumothorax, in other words. Therefore, surgery of the lung, although a question still *a la terre*, as the French say, we must admit has not left the experimental stage entirely. I believe that the aspirating needle has done more to retard surgery than any other known instrument. It is said to have been invented by Galen; and since the time of Galen pleurotomy ceased to be performed, I believe, for at least fourteen centuries. At the time of Hippocrates pleurotomy was well known.

Tubercular Tendonitis.—Dr. H. B. A. Kugeler presented this case. He said: The patient, a German, married, bricklayer by trade, is 44 years of age. He came to me on the 8th of last December with this teno-synovitis on his hand. He was going to the hospital to have it operated on, but came to see me beforehand, and I told him I thought we could do it in the office. I did it under the infiltration method of anesthesia. I dissected out the large one on his hand first. It came out very nicely except that it had to be shelled off from every one of the tendons of the common extensor, and then it went through under the annular ligament into the forearm, and instead of being simply sacculated there, as I thought it was, it appeared to go clear up the tendon. I did not feel like following it up and dissecting it all the way. I could, with the finger above and making pressure, expel a jelly-like mass with bean-shaped bodies, in abundant quantities. The hand healed up nicely in a few days and has not given any trouble since, except when he lifts his hand the extensor tendon seems to be too long and his fingers, especially the index and second finger, drop. The wound above the wrist opened several times and stayed open for several months, but it finally closed and left this hard mass [patient exhibited], and this hardness extending up the tendon. Then he began to cough quite freely. He had coughed before, but it had not troubled him much. I examined his lungs and found a consolidation in the right apex, and an examination of the sputum revealed numbers of bacilli. About two months ago he came to me and said that his mouth hurt him. He said he had always wanted to tell me about it, but thought he was bothering me enough without showing me his mouth. Before coming to me with his hand, a small ulcer had appeared between those two teeth. He thought that a piece of bread or meat had lodged there and he picked it with a toothpick. The ulcer gradually enlarged until it surrounded the tooth and began to extend down on the gum. It was more on the outer surface, and not around the tooth, when I first saw it. I cauterized it first, but that made very little impression, and it began to increase very gradually. Then I injected cocaine and with a knife dissected the entire thing out, afterwards using a sharp curette and applying nitric acid freely. That finished that proposition. It closed up to some extent, and then began to break down again. The tooth got very loose and three or four weeks ago I pulled it out, and the socket has healed up very nicely, but there is this ulcerated surface around the edge yet. It is now looking better than for some time. I am treating it with a 10 per cent. lactic acid solution. It is an interesting case, as these tubercular ulcerations of the mouth are not very common. It is the first one that I have seen of that size in that position. There are also the other peculiar tubercular lesions that have shown up in this case, and the man is doing fairly well under it all.

Dr. Dudley Tait: In hospitals it has frequently been noted after minor operations on tubercular patients that pulmonary lesions suddenly start up and create great disturbance.

Dr. H. M. Sherman: This case interests me very much indeed. I have been looking for one for five years and have not found it. I have seen but one case of tubercular tenositis, and that was in the arm of a man. He had been my driver and I discharged him, and he turned up afterwards as the patient of somebody else. I saw his arm, but I could do nothing for it, and I do not think the other man did anything either. The lesion in the mouth I should think should be incised very widely. I do not see anything to be gained by waiting or taking any half-way measures like a curette. It should be done with a knife or pair of scissors. I think that one of the mistakes that I have made in almost all my practice has been in keeping inside of that fibrous wall which is built up around a tuberculous lesion. This morning I went outside of the fibrous wall, so that I left nothing but healthy tissue. My patient promptly died. I should go well outside of that, fully half a centimeter in every direction, as close to the bone as possible, without exposing it.

Dr. Kugeler, in reply to an inquiry, said the ulcer always maintained the same dirty gray floor with overhanging edge, and of late, since lactic acid has been used, it seems to have assumed a somewhat brighter look, but it always has this yellowish appearance and the rough edges. I took this whole edge off at the time I cut it out.

Dr. Tait: I differ from Dr Sherman regarding treatment. It seems to me the first indication is in regard to the pulmonary lesion. The pulmonary tuberculosis, and the history of the case as given by Dr. Kugeler would lead us to believe that the infection in the mouth was primarily of pulmonary origin; therefore, an operation upon the mouth would be followed, probably, by secondary infection through the sputum.

Dr. Sherman: I acknowledge the force of that. I did not hear Dr. Kugeler's full report. I remember that he did say that there was a pulmonary lesion.

REVIEWS AND NOTICES.

A Text-book of the Diseases of Women. By Charles B. Penrose, M.D., Ph.D., Professor of Gynecology in the University of Pennsylvania; Surgeon to the Gynecian Hospital, Philadelphia. Illustrated. Philadelphia: W. B. Saunders; pp. 530. Price, $3 50 net.

In the preface Dr. Penrose informs us that this work was written for the medical student; that it is founded on the best teaching of modern gynecology, untrammeled by antiquated theories or methods of treatment, and that, in most instances, it contains but one plan of treatment for each disease, in order, as far as possible, to avoid confusing the student or physician who consults it for practical guidance. The author has succeeded in producing an admirable text-book for both student and physician. The text is clear, the treatment generally judicious, the scope comprehensive, and the make-up excellent.

The Diseases of Women—A Hand-book for Students and Practitioners. By J. Bland Sutton, F.R.C.S., Eng., Surgeon to the Chelsea Hospital for Women; Assistant Surgeon, Middlesex Hospital, London; and Arthur E. Giles, M.D., B. Sc., Lond., F.R.C.S., Edin., Assistant Surgeon, Chelsea Hospital for Women, London. With 115 illustrations. Philadelphia: W. B. Saunders. pp. 436. Price, $2.50, net.

Notwithstanding the variety and multiplicity of "hand-books" and "text-books" of gynecology, which so often contribute more to the depletion of our purse than to the repletion of our mind, the present volume, in its many excellencies, has a real and sufficient excuse for being. It is brief and yet comprehensive, modern and yet judicious, progressive and yet conservative, and may be conscientiously commended to professional favor.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held September 7, 1897, the following were granted certificates to practise medicine in this State:

Chas. A. Andrus, Perris; Toledo Med. Coll., Ohio, Mar. 9,'87.
F. S. Byington, San Francisco; Louisville Med. Coll., Ky. Mar. 25,'96.
Vilmas Condroy, Los Angeles: Univ. Budapest, Austria, Hungary, Mar. 31,'69.
J. F. Cropp, Walla Walla Wash.; Jefferson Med. Coll, Pa. Mar. 12,'78.
John Alfred Deyell, North Ontario; Trinity Med Coll., Ontario, Canada, Apr. 8,'97.
Dumont Dwire, Los Angeles: Med. Dept. Willamette Univ., Or., Apr. 11,'87.
George Fee, Reno, Nev.; Detroit Med. Coll., Mich, Mar. 22,'92.
John C. Ferbert, Los Angeles; Coll. Med, Univ. Southern Cal., June 3,'97
Nettie E. Hammond, Los Angeles; Coll. Med, Univ. Southern Cal., June 3,'96.

Nelson H. Henderson, Chicago, Ill.; Coll. Phys. and Surg., Chicago, Ill., Feb. 23,'86.
E. C. Houston, Gold, Cal ; Louisville Med. Coll., Ky., Feb 16,'88.
Everett M. Hurd, Salem, Or.; Med. Dept. Washington Univ., Mo , Mar. 14,'93.
Robert W. Murphy, Jr., San Francisco; Cooper Med. Coll., Cal , Aug. 23,'97.
Frank L. O'Neil, Los Angeles; Coll. Med., Univ Southern Cal., June 3,'97.
John A. Reuter, Jacksonville, Or.; Rush Med. Coll., Ill., May 26 '97.
Asbury G. Smith (lieu certificate), Pasadena; Med. Dept. Harvard Univ., Mass., June 27,'83.
Kikujiro Sago, Seattle, Wash.; Cooper Med Coll., Cal., Aug. 23,'97
Thomas W. Stone, Stockton; Louisville Med. Coll., Ky., Feb. 26,'84.
Emma K. Willits, San Francisco; Med. Dept. Northwestern Univ., Ill., June 11,'96.

At a special meeting, held September 16, 1897, the following certificates were granted:

W. J. Caesar, San Francisco; Coll. Phys. and Surg., San Francisco, Cal , July 15,'97.
F. S. Duncan. San Francisco; Coll Phys and Surg , San Francisco, Cal , July 15,'97.
Wm. Edwards, San Francisco: Coll. Phys. and Surg., San Francisco, Cal , July 15,'97.
H. B. Fasig, Los Angeles; Coll. Phys. and Surg , San Francisco, Cal., July 15,'97
Arch C. Hart, San Francisco; Coll. Phys. and Surg., San Francisco, Cal., July 15,'97.
J. R. Leadsworth, Healdsburg; Coll. Phys. and Surg., San Francisco, Cal., July 15,'97.
J. Francis White, San Francisco; Coll. Phys and Surg. San Francisco, Cal., July 15,'97.
F. H Whitsitt, Kern; Coll. Phys and Surg., San Francisco, Cal., July 15,'97.
Kime, Baudon, Or.; Med. Dept. Univ Oregon, Apr. 5,'97.
Robt. J. McAdams, Los Angeles; Hosp Coll. Med , Ky , June 18,'95.
Wm. A. Schwallie, San Francisco; Med. Dept. Univ Cincinnati, Ohio, 1889.
Edward J. Walsh, Los Angeles; Rush Med. Coll , Ill., Mar. 31,'91.
Helen J. Waterman, San Francisco; Women's Med Coll., Penn., May 19,'97.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific) from August 20, 1897, to September 20, 1897.

Leave of absence for one month, to take effect on or about the 20th instant, with permission to apply for an extention of one month, is granted Lieutenant Surgeon J. V. D. Middleton, Deputy Surgeon General, Chief Surgeon Department of California.

The leave of absence granted Lieutenant Colonel Johnson V. D. Middleton, Deputy Surgeon General. Chief Surgeon Department of California, is extended one month.

Pursuant to instructions from the Secretary of War, Captain Guy L. Edie, Assistant Surgeon, will proceed today to Seattle, Washington, and there report to Lieutenant Colonel George M. Randall, 8th Infantry, to accompany that officer's command for duty at Saint Michael's, Alaska. Par. 1, S O. 94, Dept. of Cal , Sept 19, 1897.

Official List of Changes in the Medical Department U. S. Navy (Pacific Station from July 20, 1897, to September 20, 1897.

Assistant Surgeon J. C. Peyer detached from Naval Laboratory, Brooklyn, and ordered to Naval Hospital, Mare Island, Cal.

Assistant Surgeon W. M. Wheeler detached from Naval Hospital, Mare Island, Cal., and ordered to the "Oregon," San Francisco, Cal.

Assistant Surgeon A. Farenholt detached from "Oregon" and ordered to convey insane patient to Washington, D C , then to Receiving Ship "Vermont," at New York

Medical Inspector A. F. Price detached from New York Navy Yard and ordered to U. S. S. "Olympia," as fleet surgeon.

Medical Inspector J. G. Ayers detached from "Olympia," ordered home, and granted two months' leave of absence.

Surgeon H. E. Ames detached from U. S S. "Cincinnati," on 25th July, and ordered to Naval Hospital, Yokohama, per steamer 14th August.

Surgeon P. Fitzsimons detached from Naval Hospital, Yokohama, ordered home, and to wait orders.

Surgeon F. Anderson detached from U. S. S. "Dolphin" and ordered to Naval Hospital, Yokohama.

Past Assistant Surgeon Geo. Rothganger detached from U. S. S. "Pinta" and ordered to U. S. S. "Wheeling"

Assistant Surgeon W. M. Wheeler detached from U. S. S. "Oregon," and ordered to Navy Yard, Mare Island, Cal., in connection with U. S. S. "Marietta"

Assistant Surgeon W. M. Wheeler detached from "Marietta" and ordered to "Wheeling"

Past Assistant Surgeon Geo. Rothganger detached from "Wheeling" and ordered to "Marietta."

ITEMS.

Dr. W. A. Phillips has removed from Reno, Nevada, to Pacific Grove, Cal.

Dr. J. A. Simpson has removed from 1132 to 1249 Kentuckey street, San Francisco, Cal.

Dr. Alemby Jump has located at North San Juan, where he has taken the place of Dr. Harris.

Dr. O. H. Hund, who has been in Europe for the past seven months, has resumed his practice in San Francisco.

Dr. W. W. Macfarlane has removed from Woodland, Cal., to Sacramento, Cal., and has opened an office at 719 Ninteenth street.